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**FINAL
RECORD OF DECISION/REMEDIAL ACTION PLAN
OPERABLE UNIT 2
NO ACTION SITES AND AREAS OF CONCERN**

**MARINE CORPS AIR FACILITY
TUSTIN, CALIFORNIA**

JULY 2000

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JULY 2000

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ACRONYMS/ABBREVIATIONS

ANL	Argonne National Laboratory
AOC	area of concern
ARAR	applicable or relevant and appropriate requirement
ASI	Advanced Sciences, Inc.
AST	aboveground storage tank
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BDL	below detection limits
bgs	below ground surface
BNI	Bechtel National, Inc.
BRAC	Base Realignment and Closure
Cal-EPA	California Environmental Protection Agency
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	chemical of potential concern
CSF	cancer slope factor
DCA	dichloroethane
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethene
DDT	dichlorodiphenyltrichloroethane
DON	Department of the Navy
DTSC	(Cal-EPA) Department of Toxic Substances Control
EPC	exposure-point concentration
ESI	expanded site inspection
FS	feasibility study
HHRA	human-health risk assessment
HI	hazard index
HQ	hazard quotient
HUD	(Department of) Housing and Urban Development
IAS	initial assessment study
IRP	Installation Restoration Program
JMM	J.M. Montgomery Associates
JP-5	jet propellant – Grade 5

Acronyms/Abbreviations

LRA	Local Redevelopment Agency
LTA	lighter than air
µg/kg	micrograms per kilogram
MCAF	Marine Corps Air Facility
MCAS	Marine Corps Air Station
MCL	maximum contaminant level
MEK	methyl ethyl ketone
mg/kg	milligrams per kilogram
MSL	mean sea level
MWSS	Marine Wing Support Squadron
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	no further action
OHM	OHM Remediation Services Corp.
OU	operable unit
O/W	oil/water
PAH	polynuclear aromatic hydrocarbons
PCA	tetrachloroethane
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
POL	petroleum, oils, and lubricants
PR	preliminary review
PRG	preliminary remediation goal
RAB	Restoration Advisory Board
RAGS	Risk Assessment Guidance for Superfund
RAP	remedial action plan
RCRA	Resource Conservation and Recovery Act
RFA	RCRA facility assessment
RfD	reference dose
RI	remedial investigation
ROD	record of decision
RWQCB	(California) Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SCS	SCS Engineers, Inc.
SI	site inspection

Acronyms/Abbreviations

SP/RP	Specific Plan/Reuse Plan
SV	sampling visit
SVOC	semivolatile organic compound
SWDIV	Southwest Division Naval Facilities Engineering Command
SWMU	solid waste management unit
TAL	target analyte list
TCA	trichloroethane
TCE	trichloroethene
TDS	total dissolved solids
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
UCI	University of California, Irvine
UCL	upper confidence level
USACOE	United States Army Corps of Engineers
USDA	U.S. Department of Agriculture
U.S. EPA	United States Environmental Protection Agency
USMC	United States Marine Corps
UST	underground storage tank
VOC	volatile organic compound
VSI	visual site inspection
WBZ	water-bearing zone

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DECLARATION

DECLARATION

SITE NAME AND LOCATION

Marine Corps Air Facility (MCAF) Tustin
Operable Unit (OU)-2

Installation Restoration Program (IRP) Sites: IRP-2, IRP-9, IRP-13E

Areas of Concern (AOCs): AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04,
MDA-07, MMS-01, MWA-03

Orange County, California

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected final remedial action for IRP-2, IRP-9, and IRP-13E and AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03 at MCAF Tustin in Orange County, California. The remedial action was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan. This Record of Decision (ROD)/Remedial Action Plan (RAP) has also been prepared in accordance with California Health and Safety Code Section 25356.1. This action is based on the administrative record file for these sites/AOCs.

The state of California (through the California Environmental Protection Agency Department of Toxic Substances Control [DTSC] and Santa Ana Regional Water Quality Control Board [RWQCB]) and the United States Environmental Protection Agency (U.S. EPA) agree on the selected remedy.

DESCRIPTION OF THE SELECTED REMEDY: NO ACTION

No action is the selected remedy for IRP-2, IRP-9, and IRP-13E and AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03. In selecting the no action remedy for these sites/AOCs, the Department of the Navy (DON) has determined that the existing condition of the sites/AOCs is protective of human health and the environment.

Removal actions were conducted at MWA-03, IRP-2, IRP-9A, and IRP-9B. The Resource Conservation and Recovery Act action at MWA-03 took place in December 1997 and involved the excavation, transport, and treatment of 285 tons of total petroleum hydrocarbon (TPH)- and polynuclear aromatic hydrocarbon (PAH)-contaminated soil using an on-site thermal desorption unit. The non-time-critical removal action of soil at IRP-2 took place in May 1997. This action involved excavation and treatment of approximately 569 tons of PAH-contaminated soil. A non-time-critical removal action was conducted at IRP-9A between 10 July and 04 September 1997 and at IRP-9B between 14 October 1998 and 05 January 1999. The actions at IRP-9A and IRP-9B involved excavation and treatment of approximately 700 and 6,827 tons of TPH- and

PAH-contaminated soil, respectively. Human-health risk assessments were performed to evaluate the risks remaining after the removal actions at MWA-03, IRP-02, IRP-9A, and IRP-9B. These assessments showed that the postremoval condition at each site/AOC is protective of human health and the environment.

Soil and groundwater at each of the sites and AOCs included in this OU-2 ROD/RAP were evaluated and were determined to require no further action due to site-specific releases. However, IRP-9, AS-08, MDA-04, and MDA-07 are located near large volatile organic compound plumes that originate from three OU-1 sites (IRP-3, IRP-12, and IRP-13S). Therefore, groundwater at IRP-9, AS-08, MDA-04, and MDA-07 is being addressed as part of the OU-1 remedial action. The need for groundwater cleanup at IRP-9 and AS-08, MDA-04, and MDA-07 will be evaluated in conjunction with remedial action at OU-1 and will be documented in a separate ROD/RAP. DTSC, RWQCB, and U.S. EPA agree with this approach.

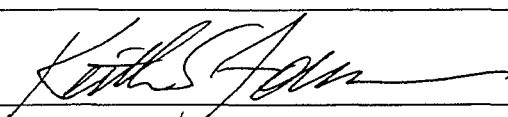
No monitoring or deed restrictions are required to address chemicals present in soil and/or groundwater as a result of operations at the no action sites/AOCs. However, use restrictions may be required as part of potential remedial actions associated with OU-1. The need for such restrictions will be addressed in the proposed plan and ROD/RAP for OU-1.

The property containing IRP-9, AS-08, MDA-04, and MDA-07 will not be transferred until the evaluation of OU-1 is complete and remedial action is finalized unless an early transfer is pursued. Institutional controls are anticipated and will be developed in conjunction with an Environmental Restriction Covenant and Agreement. When the Environmental Restriction Covenant and Agreement is finalized, it will be executed by the state and the federal government contemporaneously with the negotiation and execution of the conveyance of the property to the transferee(s) by deed, pursuant to the Defense Base Closure and Realignment Act of 1990, 10 *United States Code* Section 2687 note.

DECLARATION STATEMENT

The DON has determined that no remedial action is necessary to ensure the protection of human health and the environment at IRP-2, IRP-9, and IRP-13E and AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03. This determination was based on extensive field investigations, laboratory analyses, and a thorough assessment of potential human-health risks at each location. Ecological risk assessments were not performed at these sites/AOCs because habitat surveys performed in October and November 1994 and February 1995 showed that there is no suitable wildlife habitat present (BNI 1996i,j). The results of the human-health risk assessments of these sites/AOCs show that the chemicals present at the sites/AOCs do not present an unacceptable risk to human health or the environment. Therefore, no remedial action is required at these sites/AOCs. Because hazardous substances are not present at concentrations above unacceptable levels, CERCLA Section-121 cleanup standards do not apply.

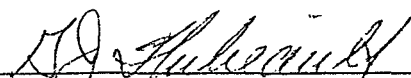
Declaration

Signature:  Date: 9/21/00

Mr. Keith Forman
Base Realignment and Closure Environmental Coordinator
Marine Corps Air Facility Tustin

Signature:  Date: 9/26/00

Mr. John E. Scandura, Chief
Southern California Operations
Office of Military Facilities
Department of Toxic Substances Control

Signature:  Date: 9/29/00

Mr. Gerard Thibeault
Executive Officer
Regional Water Quality Control Board, Santa Ana Region

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DECISION SUMMARY

Section 1**SITE NAME, LOCATION, AND DESCRIPTION**

This Record of Decision (ROD)/Remedial Action Plan (RAP) presents the selected remedial action for Installation Restoration Program (IRP) Sites IRP-2, IRP-9, and IRP-13E and Areas of Concern (AOCs) AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03 Marine Corps Air Facility (MCAF) Tustin in Orange County, California. The document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The decision for these sites/AOCs is based on the information contained in the Administrative Record. The Administrative Record index for the no action sites and AOCs is found in Attachment A.

1.1 SITE NAME

This decision document addresses three IRP sites and nine AOCs within Operable Unit (OU)-2 at MCAF Tustin.

The IRP sites are:

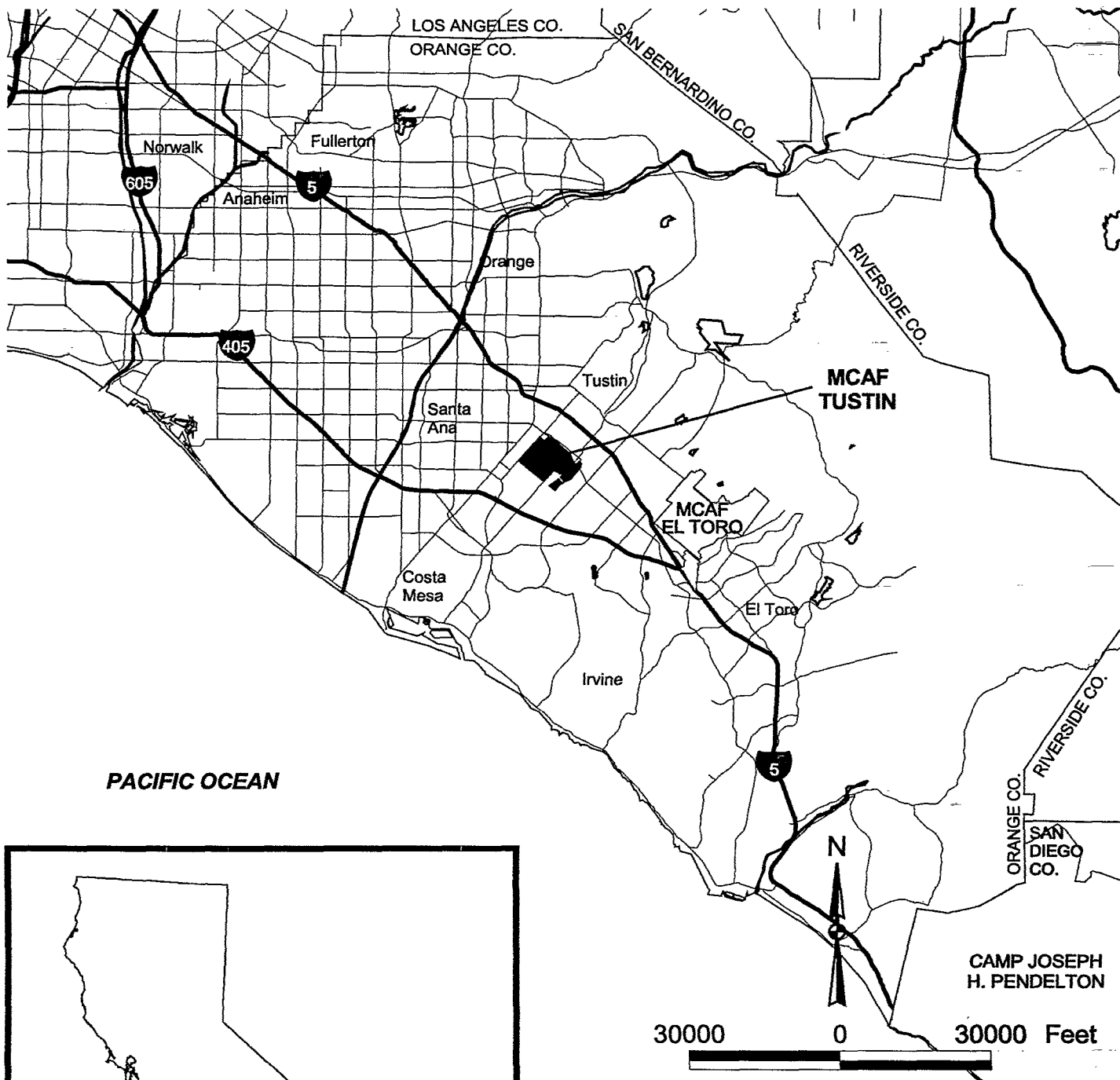
- IRP-2, Oil Disposal Area;
- IRP-9A/B Hangar No. 1 Line Shacks and Apron 1; and
- IRP-13E, East Drum Storage Area No. 3.

The AOCs are:

- AD-04, Air-Photo-Identified Possible Disposal Trench;
- AS-06, Air-Photo-Identified Possible Temporary Storage Unit;
- AS-08, Air-Photo-Identified Storage Area;
- AST-02, Air-Photo-Identified Possible Aboveground Storage Tank;
- AST-04, Air-Photo-Identified Storage Unit;
- MDA-04, Miscellaneous Disposal Area;
- MDA-07, Miscellaneous Disposal Area;
- MMS-01, Major Spill Area; and
- MWA-03, Former Wash Pad.

1.2 SITE LOCATION

MCAF Tustin is located in southern California near the center of Orange County, approximately 40 miles south of downtown Los Angeles and more than 100 miles north of the California-Mexico border (Figure 1-1). The three IRP sites and nine AOCs addressed in this ROD/RAP are located throughout MCAF Tustin as shown on Figure 1-2.



Record of Decision/Remedial Action Plan

Figure 1-1

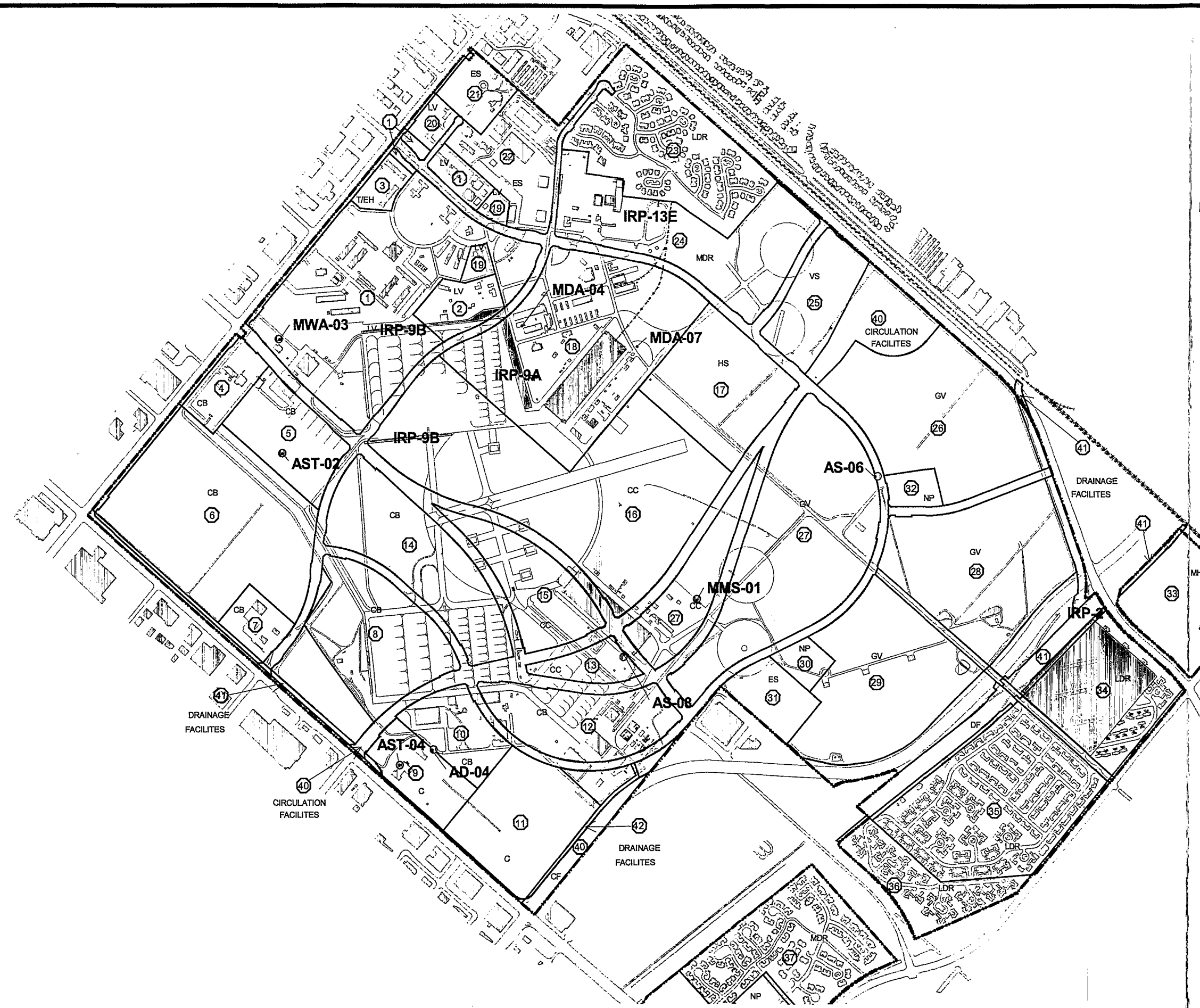
MCAF Tustin Location Map

Marine Corps Air Facility, Tustin, California



Bechtel National, Inc.
CLEAN II Program

Date: 12/22/99
File No.: 141R4884
Job No.: 22214-141
Rev No.: A



LEGEND

- GOVERNMENT PROPERTY LINE
- MCAF TUSTIN REUSE PARCELS
- MCAF TUSTIN REUSE PARCELS NUMBER
- BUILDING OR STRUCTURE
- EXISTING ROAD OR PAVED AREA
- PARKING
- RAILROAD
- OPERABLE UNIT 2

IRP SITE NO. DESCRIPTION

- 2 OIL DISPOSAL AREA
- 9A HANGAR NO. 1 LINE SHACKS
- 9B APRON 1
- 13E DRUM STORAGE AREA NO. 3 EAST

AOCs DESCRIPTION

- AD-04 AIR-PHOTO-IDENTIFIED POSSIBLE DISPOSAL TRENCH
- AS-06 AIR-PHOTO-IDENTIFIED POSSIBLE TEMPORARY STORAGE UNIT
- AS-08 AIR-PHOTO-IDENTIFIED POSSIBLE STORAGE AREA
- AST-02 AIR-PHOTO-IDENTIFIED POSSIBLE ABOVEGROUND STORAGE TANK
- AST-04 AIR-PHOTO-IDENTIFIED POSSIBLE STORAGE UNIT
- MDA-04 MISCELLANEOUS DISPOSAL AREA
- MDA-07 MISCELLANEOUS DISPOSAL AREA
- MMS-01 MAJOR SPILL AREA
- MWA-03 FORMER WASH PAD

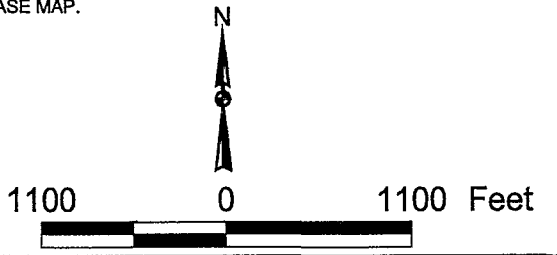
NOTE:

LOCATIONS INDICATED ARE APPROXIMATE INVESTIGATION BOUNDARIES.

SOURCES:

IRP AND AOC LOCATIONS BASED ON: FINAL REMEDIAL INVESTIGATION REPORT FOR OU-1 AND OU-2, MCAF TUSTIN, CALIFORNIA, BNI, NOVEMBER 1997; FINAL EXPANDED SITE INSPECTION REPORT, MCAS TUSTIN, CALIFORNIA, BNI, MARCH 1997; AND FINAL RCRA FACILITY ASSESSMENT REPORT, MCAS TUSTIN, BNI, JUNE 1997.

BASE MAP BASED ON AERIAL SURVEY CONDUCTED BY AIRBORNE SYSTEMS, INC. ON OCTOBER 21, 1990. REVISED BY BECHTEL IN NOVEMBER 1997 TO UPDATE BASE MAP.



Record of Decision / Remedial Action Plan

Figure 1-2

No Action IRP Sites and AOCs

Marine Corps Air Facility Tustin, California



Bechtel National, Inc.
CLEAN II Program

Date: 5/30/00
File No.: 141L4880
Job No.: 22214-141
Rev No.: D

Section 1 Site Name, Location, and Description

During the past 20 years, urbanization has changed the vicinity from a predominantly agricultural area to a compact residential and industrial/manufacturing neighborhood. According to a 1990 Orange County census (Jacobs Engineering 1993a), approximately 260,000 persons reside within a 4-mile radius of MCAF Tustin.

1.3 SITE DESCRIPTION

During operations, the mission of MCAF Tustin was to maintain and operate facilities and to provide services and material to support operations of a Marine wing, or units thereof, and other activities and units designated by the commandant of the Marine Corps in conjunction with the Chief of Naval Operations.

To support the installation's mission, facility operations were expanded over the years to include more than 200 structures and various facilities, including a 3,000-foot-long runway, aircraft parking aprons, and numerous aircraft maintenance shops. Prior to closure, MCAF Tustin occupied 1,595 acres of land. Approximately 212 acres were used for base housing, and 1,383 acres were used for nonhousing purposes. All of the property is developed, except for 674 acres that are leased for commercial farming. The adjacent/surrounding land uses around MCAF Tustin include residential, commercial/business, industrial, and recreational. Table 1-1 describes each of the IRP sites/AOCs addressed in this ROD/RAP.

On 02 July 1999, operational closure of all military activities at MCAF Tustin was completed. The Marine Corps' mission at the facility was incorporated in Marine Corps Air Station (MCAS) Miramar operations in San Diego, California.

Section 1 Site Name, Location, and Description

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**Table 1-1
Site Descriptions**

IRP Site/ AOC No.	IRP Site/AOC Name	Approximate Study Area (square feet)	Approximate Depth to Groundwater (feet bgs)	Site/AOC Description
2	Oil Disposal Area	1,114,800	15 – 34	IRP-2 is located in the northeast portion of MCAF Tustin. The site is bounded by Edinger Avenue to the north, Harvard Avenue to the east, Moffett Drive to the south, and Peters Canyon Channel to the west. The site is generally flat and contains 278 housing units and various recreational facilities such as tennis, handball, and basketball courts. Open grassy areas surround the residences and recreational facilities. Prior to the construction of housing in the early 1980s, IRP-2 was used as an oil disposal area.
9	Hangar No. 1 Line Shacks and Apron 1	116,000	20	IRP-9 is located in the central portion of MCAF Tustin adjacent to Aircraft Hangar No. 1. The site comprises two areas (IRP-9A and IRP-9B). IRP-9A consists of a grassy strip with flight line shacks (206 and 207) along the northern edge of aircraft Apron 1 and south of McCord Road. Fuel samples, hydraulic fluid, and oil from aircraft was reportedly spilled onto the ground surface surrounding the shacks and parking apron between 1971 and 1982. IRP-9B consists of the surface soil along two strips of the northern and western grass-covered margins of Apron 1. Studies indicate that both IRP-9A and IRP-9B received contamination from helicopter exhaust emissions that were deposited on the apron and subsequently washed off onto the surface soil through rain or washwater runoff.
13E	Drum Storage Area No. 3	38,870	15 – 20	IRP-13E is located in the northwest portion of MCAF Tustin between Buildings 41 and 66. The site includes a stained area where drums of chemicals were stored. Materials stored in this area included hydraulic fluid, diesel fuel, leaded gasoline, oil, paint stripper, battery acids, and solvents.
AD-04	Air-Photo-Identified Possible Disposal Trench	6,240	7 – 10	AD-04 is located near the southern boundary of MCAF Tustin near the Armed Services Reserve Center Garage. The AOC was identified by means of an aerial photograph dated 20 September 1965. This AOC was thought to be a possible disposal trench located about 90 feet north of the eastern end of the Armed Services Reserve Center Garage. The area is currently covered by vegetation and there is no visible evidence of the AOC.
AS-06	Air-Photo-Identified Possible Temporary Storage Area	4,800	8 – 10	AS-06 is located north of Moffett Drive in the northern portion of MCAF Tustin. The AOC was identified by means of an aerial photograph dated February 1953 and was visible in other aerial photographs until January 1975. This AOC was a possible hazardous material storage unit in view of its isolated location in an undeveloped area at the north end of Kilpatrick Road. During the RFA sampling visit, a concrete building foundation was discovered and delineated using a geophysical survey.
AS-08	Air-Photo-Identified Storage Area	12,000	> 10	AS-08 is located approximately in the center of MCAF Tustin 130 feet south of the southeastern end of Hangar No. 2. The AOC was identified by means of an aerial photograph, dated 09 December 1976, and was visible in subsequent photographs taken prior to 1988. This AOC was an open storage area. AS-08 is currently covered with grass, and there is no surface expression of the former storage area. However, a concrete pad is located at the northern limit of the AOC.
AST-02	Air-Photo-Identified Possible Aboveground Storage Tank	300	4 – 6	AST-02 is located in the western corner of MCAF Tustin. AST-02 is the site of a possible former aboveground storage tank. By 1947, the possible tank had been replaced by a dark circular pit identified as a possible burn pit. Currently, the site is covered by a concrete aircraft parking apron (No. 4).
AST-04	Air-Photo-Identified Storage Unit	300	7 – 8	AST-4 is located at the southern boundary of MCAF Tustin near Barranca Parkway. The site was identified by an aerial photograph dated May 1966. This photograph showed a possible elevated tank approximately 10 feet by 30 feet in an area under development. The area is currently fenced and is occupied by the Armed Services Reserve Center.
MDA-04	Miscellaneous Disposal Area	20,000	8 – 12	MDA-04 is located in the northern portion of MCAF Tustin between McCord and Severyns Roads next to Calnan Street. The AOC consists of a paved area between Buildings 161, 173, and 253, where spills may have occurred.
MDA-07	Miscellaneous Disposal Area	50,625	> 10	MDA-07 is located in the northern portion of MCAF Tustin on Moffett Road off the northeastern corner of Hangar No. 1. The site was reportedly used beginning in 1955 as a blimp and automobile wash area. Historical aerial photographs indicate that Copeland Street has been moved, and the area where runoff and wastes seeped into the ground is now covered by asphalt.
MMS-01	Major Spill Area	3,270	6 – 10	MMS-01 is located in the central portion of MCAF Tustin east of the main helicopter-landing apron. The AOC comprises of two noncontiguous areas resulting from a spill of JP-5 in December 1989. The fuel reportedly flowed across an asphalt parking lot in two directions: northward to an unpaved dirt area (MMS-01a) and southward into a storm drain (MMS-01b). MMS-01a is rectangular, approximately 36 feet by 72 feet, and is currently partially paved. MMS-01b consists of a concrete-bermed storm drain approximately 26 feet by 26 feet. There is currently no surface expression of the spill present at the AOC.
MWA-03	Former Wash Pad	640	11	MWA-03 is located at the western boundary of MCAF Tustin off Bumblebee Road. The AOC was a former wash pad at the Fuels Branch, operated by MWSS-374 for fueling equipment and inventory. The former wash area consisted of a 40- by 16-foot concrete pad sloped to drains discharging to an O/W separator. The integrity of the concrete pad was poor and cracks were present. The unit was decommissioned in 1993.

(table continues)

Table 1-1 (continued)

Acronyms/Abbreviations:

AOC – area of concern

AST – aboveground storage tank

bgs – below ground surface

IRP – Installation Restoration Program

JP-5 – jet propellant – Grade 5

MCAF – Marine Corps Air Facility

MWSS – Marine Wing Support Squadron

O/W – oil/water

RFA – Resource Conservation and Recovery Act facility assessment

Section 2**SITE HISTORY AND INVESTIGATION ACTIVITIES**

2.1 SITE HISTORY

MCAF Tustin was initially established during World War II as a Navy lighter-than-air (LTA) facility to support air patrols off the southern California coast. The facility was commissioned in the fall of 1942, upon completion of the construction of two blimp hangars (currently national historic landmarks), and served as an LTA base until 1949, when it was decommissioned. The installation was then used as an outlying field for other military operations in the area, primarily those of MCAS El Toro.

In 1951, MCAF Tustin was reactivated to support the Korean Conflict and was used solely for helicopter operations. The installation was officially designated the Santa Ana MCAF. As the installation expanded its operations, the name was changed on 01 September 1969 to the MCAS (Helicopter[H]) Santa Ana. In 1978, the installation name was changed to MCAS (H) Tustin to reflect its annexation by the city of Tustin. In 1986, the installation was renamed MCAS Tustin, and in October 1997, the installation name was changed to MCAF Tustin.

MCAF Tustin was initially realigned in the Base Realignment and Closure (BRAC) II list (1991); further realignment and complete closure was ordered for the base under the BRAC III list (1993). To facilitate the closure and environmental restoration processes, the Department of the Navy (DON) organized a BRAC Cleanup Team (BCT) in 1993. The BCT is composed of representatives of the DON, United States Environmental Protection Agency (U.S. EPA), and the California Environmental Protection Agency (Cal-EPA) Department of Toxic Substances Control (DTSC), with support from the Santa Ana Regional Water Quality Control Board (RWQCB). The BCT has been collectively managing and coordinating cleanup and closure activities at MCAF Tustin.

MCAF Tustin was closed on 02 July 1999 in accordance with the Base Closure and Realignment Act. A Federal Facility Site Remediation Agreement between the DON and DTSC was signed in August 1999. This legal agreement defines the DON's corrective action and response action obligations under the Resource Conservation and Recovery Act (RCRA) and under CERCLA for the 16 IRP sites and 287 AOCs that have been identified at MCAF Tustin. The Site Management Plan (BNI 2000b,c) establishes schedules and deadlines for remaining environmental restoration activities and reports.

2.2 INVESTIGATION ACTIVITIES

There are no enforcement activities related to the OU-2 IRP sites/AOCs. Environmental investigation and remediation activities associated with OU-2 are implemented under an installationwide environmental program. The purpose of this program is to identify, investigate, assess, characterize, and clean up or control releases of hazardous substances, as well as to cost-effectively reduce the risk to human health and the environment from past waste disposal operations and hazardous material spills at Navy/Marine Corps facilities. The program is administered in accordance with:

- CERCLA, as amended by SARA, and the Community Environmental Response Facilitation Act;
- RCRA;
- National Environmental Policy Act; and
- California Environmental Quality Act.

CERCLA is generally applied to inactive sites where a hazardous substance is known or suspected to have been stored, placed, disposed of, or deposited. RCRA is generally applied to active areas involving solid and hazardous waste management. RCRA may also be applied by regulatory agencies to require remediation for past improper hazardous waste disposal practices and spills that resulted in a threat to the environment or human health. CERCLA sites and RCRA AOCs are addressed through slightly different processes, although it is not uncommon for sites/AOCs to be moved from one program to another as an environmental investigation progresses.

IRP-2, IRP-9, and IRP-13E were investigated under CERCLA. AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03 were originally investigated under RCRA. However, these AOCs were transferred to the CERCLA process following the RCRA facility assessment (RFA). The AOCs were transferred because the evaluation of the nature and extent of contamination, fate and transport analysis, and preliminary risk assessment indicated that groundwater beneath the AOCs had been impacted or could be impacted in the future by contaminant concentrations above regulatory or risk-based levels. Soil and groundwater data collected at these AOCs during the RFA were subsequently evaluated under a basewide groundwater study performed for the OU-1/OU-2 remedial investigation (RI) (BNI 1997a).

2.2.1 CERCLA Investigation Activities

In 1983 and 1984, the DON performed an initial assessment study (IAS) to locate potentially contaminated sites at MCAF Tustin. The IAS report identified 14 potentially contaminated sites (IRP-1 through IRP-14 [Brown and Caldwell 1985]). Potentially contaminated sites were identified based on records searches and employee interviews. The report recommended sampling locations and analytical parameters to confirm the suspected contamination at the sites.

Following completion of the IAS, the Marine Corps contracted for a review of the IAS to produce the Site Inspection Plan of Action (SIPOA) (JMM 1988a). The plan recommended nine IRP sites, including IRP-2, IRP-9, and IRP-13, for study and amended the site sampling plans proposed in the IAS Report.

Site inspections (SIs) were conducted by JMM from 1987 to 1988 (JMM 1988b) and by Jacobs Engineering and IT Corporation in 1992 (Jacobs Engineering 1992a). Based on the results of the SIs, the IRP sites were further evaluated through an RI and/or an expanded site inspection (ESI). The OU-1/OU-2 RI addressed basewide groundwater and five IRP sites, including IRP-13. The RI consisted of a field investigation followed by an

Section 2 Site History and Investigation Activities

evaluation of the nature and extent of contamination, a fate and transport analysis, and a baseline risk assessment. In addition, the RI included a basewide groundwater study to evaluate the impact of chemicals of potential concern (COPCs) present in soil and groundwater at several sites and AOCs, including all AOCs addressed in this ROD/RAP. The groundwater study is discussed further in Sections 5 and 7.

The ESI addressed eight IRP sites/AOCs including IRP-2 and IRP-9. These IRP sites were not investigated under the RI because previous investigations did not conclude that they present a significant threat to human health and/or the environment. Therefore, they did not warrant an investigation of the magnitude of an RI. However, to facilitate the closure of MCAF Tustin in 1999, the ESI was conducted more in accordance with the RI to ensure that sufficient information was collected to allow each site to be recommended (to the BCT) for no further action, removal action, or remedial action.

The ESI consisted of a field investigation followed by an evaluation of the nature and extent of contamination, a fate and transport analysis, a baseline risk assessment for soil and groundwater, and a screening risk assessment to evaluate risks associated with potential future groundwater contamination. Based on the results of the risk assessments and the presence of or potential for COPC contamination in groundwater, non-time-critical removal actions were recommended for soil at IRP-2 and IRP-9. Groundwater at IRP-2 was recommended for further evaluation in the OU-1/OU-2 RI (BNI 1997a). No further action was recommended for groundwater at IRP-9.

Table 2-1 summarizes CERCLA investigation activities at MCAF Tustin.

2.2.2 RCRA Investigation Activities

Potential RCRA AOCs were identified through a preliminary review (PR) (Jacobs Engineering 1991). The PR, completed in June 1991, involved evaluating existing information and interviewing personnel familiar with the facility or AOCs. As a result of the PR, MCAF Tustin established a comprehensive environmental database of AOCs that is regularly updated.

From 1991 to 1996, several visual site inspections (VSIs) of the AOCs were conducted to obtain additional evidence of a release and to classify AOCs as requiring or not requiring cleanup (Table 1-2). The VSIs included visual inspections and interviews with MCAF Tustin personnel.

In 1992, an aerial photograph review was performed by Jacobs Engineering (Jacobs Engineering 1992b). The review was designed to supplement other site-specific historical information and identify additional AOCs and solid waste management units (SWMUs) not identified in the VSIs, if any.

Section 2 Site History and Investigation Activities

Table 2-1
Summary of CERCLA Investigation Activities

Date	Investigation/Activity	Objective	Summary of Findings
1983–1984	Initial assessment study	Identify and assess sites posing a potential threat to human health or to the environment due to contamination from past hazardous materials operations.	Identified all sites studied as potentially contaminated. Recommended IRP-2 for a confirmation study and a remedial measure for IRP-8 (Brown and Caldwell 1985).
1987–1988	Former Fuel Farm investigation	Identify COPCs present in groundwater at IRP-16.	Three monitoring wells were installed and sampled. Several VOCs, including TCA, DCA, and toluene, were reported in groundwater (JMM 1988b).
1990–1993	Site inspection	Evaluate nine of the sites (IRP-2, IRP-3, IRP-5, IRP-7, IRP-8, IRP-9, IRP-12, IRP-13, and IRP-15) identified during the initial assessment study.	Further evaluation of IRP-2 and IRP-8 was recommended. An RI/FS was recommended for IRP-3, IRP-5, IRP-7, IRP-9, IRP-12, and IRP-13. No further action was recommended at IRP-15. Removal actions were not recommended for any sites (Jacobs Engineering 1993b).
1992	Former Fuel Farm investigation	Identify COPCs present in soil and groundwater at IRP-16.	No VOCs were reported in groundwater. High concentrations of TRPH were reported in soil (Jacobs Engineering 1992a).
1994–1995	Expanded site characterization	Determine background levels of COPCs in groundwater and establish baseline geochemistry of MCAF Tustin.	Installed more than 20 wells and drilled more than 30 HydroPunch® borings to determine baseline geochemistry (ANL 1994; 1995a,b).
1994–1995	Expanded site inspection	Evaluate nine IRP/AOC sites (IRP-2, IRP-6, IRP-8, IRP-9, IRP-11, IRP-15, MMS-03, MMS-04, and MMS-05). Investigation consisted of soil and groundwater sampling, fate and transport analysis, baseline risk assessment, and screening risk assessment associated with future impacts on groundwater (due to leaching of COPCs in soil).	No further action was recommended for soil at IRP-8, IRP-11, IRP-15, MMS-03, MMS-04, and MMS-05. Non-time-critical removal action was recommended for soil at IRP-2 and IRP-9. Further evaluation was recommended for soil at IRP-6. No further action was recommended for groundwater at IRP-9, IRP-15, and MMS-03. IRP-2, IRP-6, IRP-8,

(table continues)

Section 2 Site History and Investigation Activities

Table 2-1 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1995-1997	OU-1/OU-2 remedial investigation	Evaluate seven sites (IRP-3, IRP-5, IRP-12, IRP-13E, IRP-13W, IRP-13S, and IRP-16). Also perform basewide groundwater study to evaluate impact of sources of contamination at a total of 29 areas of potential concern identified under the RI, ESI, and RFA programs.	IRP-11 and MMS-04 and MMS-05 were recommended for further evaluation in the RI basewide groundwater program, based on the risk assessment and evaluation of COPCs in groundwater (BNI 1996a). No further action was recommended for 23 of the 29 areas of potential concern (IRP-2, IRP-5, IRP-6, IRP-8, IRP-11, IRP-13E, IRP-13W, and IRP-16 and AOCs AD-04, AS-06, AS-08, AST-02, AST-04, DSS-01, DSS-02, MDA-02, MDA-04, MDA-07, MMS-01, MWA-03, MMS-04, MMS-05, and ST-67). No further action was also recommended for soil at these 23 sites in the ESI, RFA, or RI report. (Note: The no further action recommendation for IRP-13W was made subsequent to a non-time-critical removal action.) An FS was recommended for IRP-3 (which includes TOW-X3 and -X4), IRP-12, and IRP-13S. Further action was recommended for IRP-1. Two of these sites and nine of these AOCs are the subject of this ROD/RAP (BNI 1997a).
1996	OU-3 RI/FS	Assess nature and extent of contamination at IRP-1 and evaluate remedial action.	Recommended remedial action is containment of waste left in place using existing cover and a containment wall for contaminated groundwater (BNI 1996b,c).
1996	Removal action at IRP-16	Excavate and treat petroleum-contaminated soil under a petroleum corrective action.	Approximately 15,000 tons of soil was excavated, of which 6,000 tons of contaminated soil was treated and the site backfilled and restored. Activities were completed in August 1996 (OHM 1997).
1997	Non-time-critical removal action at IRP-2	Excavate and treat PAH-contaminated soil.	Approximately 569 tons of PAH-contaminated soil was excavated and treated. Activities were completed in June 1997 (BNI 1996d; OHM 1998a).

(table continues)

Section 2 Site History and Investigation Activities

Table 2-1 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1997 – 1999	Non-time-critical removal action at IRP-9A and IRP-9B	Excavate and treat PAH-contaminated soil.	Approximately 701 tons and 6,837 tons of soil were excavated and treated from IRP-9A and IRP-9B, respectively, for a total of 7,538 tons. Activities were completed at IRP-9A in September 1997 and IRP-9B in December 1998 (BNI 1996d; OHM 2000a).
1997	Non-time-critical removal action at IRP-13W	Excavate and treat TPH- and PAH-contaminated soil.	Approximately 4,000 tons of soil were removed, and site restoration activities (paving and fencing) were performed as part of a non-time-critical removal action at IRP-13W. Activities were completed in November 1997.
1999	OU-1 FS	Evaluate remedial alternatives for IRP-3, IRP-12, and IRP-13S.	Six remedial alternatives were evaluated, including no action, natural attenuation, hydraulic containment, groundwater extraction, iron-wall, and vacuum-enhanced groundwater extraction (BNI 1996b).
1999	BCT meeting 23 September 1999	Modify recommended action for six sites and six AOCs.	Recommended a focused FS for IRP-5, IRP-6, IRP-8, IRP-11, IRP-13W, and IRP-16 and AOCs DSS-01, DSS-02, MDA-02, MMS-04, MMS-05, and ST-67 due to the presence of contaminants in shallow groundwater at concentrations exceeding regulatory limits. These sites/AOCs now compose OU-4.

(table continues)

Section 2 Site History and Investigation Activities

Table 2-1 (continued)

Acronyms/Abbreviations:

ANL – Argonne National Laboratory
AOC – area of concern
BCT – Base Realignment and Closure Cleanup Team
BNI – Bechtel National, Inc.
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
COPC – chemical of potential concern
DCA – dichloroethane
ESI – expanded site inspection
FS – feasibility study
IRP – Installation Restoration Program
JMM – James M. Montgomery Engineers, Inc.
MCAF – Marine Corps Air Facility
OHM – OHM Remediation Services Corp.
OU – operable unit
PAH – polynuclear aromatic hydrocarbon
RAP – remedial action plan
RFA – Resource Conservation and Recovery Act (RCRA) facility assessment
RI – remedial investigation
ROD – record of decision
TCA – trichloroethane
TPH – total petroleum hydrocarbons
TRPH – total recoverable petroleum hydrocarbons
VOC – volatile organic compound

Section 2 Site History and Investigation Activities

Most AOCs at MCAF Tustin were classified as not requiring cleanup using information gathered in the PR and VSI. However, 50 AOCs were investigated further in 1995–1996 during a sampling visit (SV). The purpose of the SV was to fill data gaps that remained upon completion of the PR and VSI by collecting environmental samples and additional field data.

Data collected during the PR, VSI, and SV were summarized in a final RFA Report (BNI 1997b). Based on the screening human-health risk assessment performed in the RFA and the presence of or potential for COPC contamination in groundwater, AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03 were recommended for further evaluation in the OU-1/OU-2 RI (BNI 1997a).

Table 2-2 summarizes RCRA investigation activities at MCAF Tustin.

Section 2 Site History and Investigation Activities

Table 2-2
Summary of RCRA Investigation Activities

Date	Investigation/Activity	Objective	Summary of Findings
1991	PR	Conduct a records search and collect data to identify AOCs that had exhibited releases or had the potential for release of hazardous constituents to the environment.	Established a comprehensive environmental database that included 246 identified AOCs (Jacobs Engineering 1991).
1992	VSI	Identify additional potential AOCs not identified during the PR and conduct a VSI and interviews about all potential AOCs. Recommend selected AOCs for SV.	Of the 186 sites visually inspected, 58 were recommended for an SV and 128 were recommended for no SV (Jacobs Engineering 1992a).
1992	Aerial photograph review	Conduct an aerial photograph review to supplement other site-specific historical information and identify additional AOCs and SWMUs, if any, not identified in the VSI.	Thirty-five additional AOCs were identified and recommended for visual inspection (Jacobs Engineering 1992b).
1992	VSI addendum	Conduct a VSI for additional areas identified during the aerial photograph review.	Of the 35 areas visually inspected, 13 were recommended for an SV and 22 were recommended for no SV (Jacobs Engineering 1992c).
1994–1995	ESI (CERCLA activity that included RCRA AOCs)	Evaluate nine IRP/AOC sites (IRP-2, IRP-6, IRP-8, IRP-9, IRP-11, IRP-15, MMS-03, MMS-04, and MMS-05).	Refer to Table 2-1.
1995–1996	SV	Conduct field sampling for 50 AOCs.	Field sampling was conducted in 1995–1996. Sampling consisted of soil sampling (at all AOCs) and groundwater sampling at selected AOCs. Results are provided in the final RFA Report (BNI 1997b).
1995	Supplemental VSI	Inspect three additional AOCs identified during the ongoing base closure and interview facility personnel to collect evidence of a release.	Recommended no SV for three AOCs (BNI 1996e).
1995	BCT meetings, 31 January and 01 February 1995	Disposition of eight potential AOCs identified during preparation of the 1995 BCP.	BCT recommended seven AOCs for no further action; one AOC was recommended for an SV (MCAS Tustin BCT 1995).

(table continues)

Section 2 Site History and Investigation Activities

Table 2-2 (continued)

Date	Investigation/Activity	Objective	Summary of Findings (Reference)
1996	Second addendum to revised PR/draft VSI	Address 38 potential AOCs identified as part of continuing base closure activities.	Most of these sites were found to be identifiable with or totally within the boundaries of existing AOCs. Fourteen AOCs were recommended for further investigation in an SV (MCAS Tustin 1996).
1996	BCT meeting, 03 September 1996	Disposition of eight additional AOCs identified during preparation of the 1996 BCP.	BCT recommended four AOCs for no further action; four AOCs were recommended for an SV (MCAS Tustin BCT 1995).
1996	VSI of Osumi Corporation Yard	Conduct a visual inspection and interview lessee of the Osumi Corporation Yard to assess whether there were any releases of pesticides, petroleum hydrocarbons, or spent solvents.	Identified a UST that requires future removal when it becomes inactive under the UST program. No releases were observed or identified during the inspection, and an SV was not recommended for this VOC. The VSI was completed in September 1996 (BNI 1996f).
1997	RCRA facility assessment	Present results of the SV for 50 AOCs. Summarize recommended action for 208 AOCs not included in the SV.	AOCs AD-04, AS-06, AS-08, AST-02, AST-04, DSS-01, DSS-02, MDA-02, MDA-04, MDA-07, MMS-01, MWA-03, and ST-67 were recommended for further evaluation in the OU-1/OU-2 RI.
1997	RCRA action for AOC MWA-03	Conduct RCRA removal action at MWA-03 as recommended in the final RFA Report.	Approximately 290 tons of soil was removed and treated on-site to remove PCBs, PAHs, and VOCs. Removal action was completed in December 1997 (OHM 1998b).
1997	RI for OU-1 and OU-2 (CERCLA activity that included evaluation of RCRA AOC data)	Perform a basewide groundwater study to evaluate COPCs in soil and groundwater at OU-1 and OU-2 IRP sites and selected AOCs.	Refer to Table 2-1.
1999	HydroPunch® investigation at MDA-02	Support no further action recommendation for groundwater.	Recommended that further evaluation of groundwater is unnecessary and MDA-02 should remain an NFA site.

(table continues)

Section 2 Site History and Investigation Activities

Table 2-2 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1999	BCT meeting 23 September 1999	Modify recommended action for six sites and six AOCs.	Recommended a focused FS for IRP-5, IRP-6, IRP-8, IRP-11, IRP-13W, and IRP-16 and AOCs DSS-01, DSS-02, MDA-02, MMS-04, MMS-05, and ST-67 due to the presence of contaminants in shallow groundwater at concentrations exceeding regulatory limits. These sites/AOCs now comprise OU-4.

Acronyms/Abbreviations:

AOC – area of concern
 BCP – Base Realignment and Closure (BRAC) Cleanup Plan
 BCT – BRAC Cleanup Team
 BNI – Bechtel National, Inc.
 CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
 COPC – chemical of potential concern
 ESI – expanded site inspection
 FS – feasibility study
 IRP – Installation Restoration Program
 MCAS – Marine Corps Air Station
 NFA – no further action
 OHM – OHM Remediation Services Corp.
 OU – operable unit
 PAH – polynuclear aromatic hydrocarbon
 PCB – polychlorinated biphenyl
 PR – preliminary review
 RCRA – Resource Conservation and Recovery Act
 RFA – RCRA facility assessment
 RI – remedial investigation
 SV – sampling visit
 SWMU – solid waste management unit
 UST – underground storage tank
 VOC – volatile organic compound
 VSI – visual site inspection

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Section 3

HIGHLIGHTS OF COMMUNITY PARTICIPATION

A Community Relations Plan (BNI 1996f) was developed to document concerns identified during community interviews and to provide a description of the community relations activities planned in response to information received from the community. The initial plan was prepared in 1991 and revised in 1993 and 1995. The revisions incorporated the most recent assessment of community issues, concerns, and informational needs related to the ongoing environmental investigation and remediation program at MCAF Tustin.

The community relations program includes specific activities for obtaining community input and keeping the community informed. These activities include conducting interviews, holding public meetings, issuing fact sheets to provide updates on current investigations and remediation activities, maintaining an information repository where the public can access technical documents and program information, disseminating information to the local and regional media, and making presentations to local community groups.

Community members and local governmental agencies have also participated in planning for the reuse of MCAF Tustin through development of the MCAS Tustin Specific Plan/Reuse Plan (SP/RP) and its update (The Planning Center 1998).

3.1 RESTORATION ADVISORY BOARD

In 1994, individuals from local communities began to play an increasingly significant role in the environmental restoration process with the establishment of the Restoration Advisory Board (RAB). Original membership in the board, which was solicited by the Marine Corps/Navy through newspaper notices, included business and homeowners' representatives, residents, local elected officials, and regulatory agency staff.

Currently, the RAB is composed of 21 members. RAB meetings occur bimonthly, are open to the public, and include representatives from the Marine Corps/Navy, city and county offices, and regulatory agencies.

Meetings are held in the evenings after normal working hours at Building 523 at MCAF Tustin, at the city of Tustin City Hall, Clifton Miller Center, or at the Tustin Senior Center, 200 South C Street, in downtown Tustin. Several board members from the RAB have taken information from the regular meetings back to the groups they represent, thus contributing to an increased awareness of the IRP process. In addition, members of the public can contact RAB members to obtain information or express concerns to be discussed at subsequent RAB meetings.

Copies of the RAB meeting minutes are available at the MCAF Tustin Information Repository, located at the Main Library-Government Publications Department, at the University of California, Irvine (UCI). RAB meeting minutes are also located on the Navy's Southwest Division Naval Facilities Engineering Command (SWDIV) Environmental Web Page, which can be found at the following Internet address:

<http://www.efdswnavfac.navy.mil/pages/envrnmntl.htm>

3.2 PUBLIC MAILINGS

Public mailings, including information updates, fact sheets, and proposed plans, have been used to ensure an even broader dissemination of information throughout the local community. The first information update announcing the IRP process at MCAF Tustin was delivered to residents surrounding MCAF Tustin and mailed to city, state, and federal officials; agencies; local groups; and individuals identified in the Community Relations Plan in February 1993. Subsequent updates and fact sheets were mailed to the community as significant remediation milestones were reached (Table 3-1). These publications have included information concerning the status of site investigations, the upcoming remedy selection process, ways the public can participate in the investigation and remediation of MCAF Tustin, and the availability of the MCAF Tustin Administrative Record.

Proposed plans or proposed plans/draft RAPs are brief summaries of remedial alternatives proposed for a site or group of sites. The plan describes each alternative, evaluates each alternative against nine criteria, and identifies the preferred alternative. This document is issued to the public just prior to the beginning of a public comment period to provide information and solicit public input on the remedial options that underwent detailed evaluation. Once the public comment period closes, the comments are compiled, reviewed by the BCT, and used to refine the remedial action. The final decision and response to comments (known as a "responsiveness summary") are presented in the ROD/RAP.

The updates, fact sheets, and proposed plans/draft RAPs have been mailed to approximately 500 households, businesses, public officials, and agencies in an effort to reach as many community members as possible.

3.3 COMMUNITY PARTICIPATION FOR NO ACTION SITES

The final RI Report for OU-1 and OU-2 was released to the public in November 1997. The Proposed Plan/draft RAP for the OU-2 sites was issued in January 2000. These documents were made available to the public at the information repository maintained at the Main Library-Government Publications Department at UCI. The notice of availability for these documents was published in the *Tustin Weekly*, the *Orange County Register*, and the *Los Angeles Times (Orange County Edition)* approximately 1 week prior to the public meeting. The notices also announced the availability of the administrative record file for review. Complete administrative record files are available at the SWDIV office in San Diego and at MCAF Tustin. A partial record file is available for review at the information repository. The information repository also contains a complete index of the administrative record file, along with information about how to access the complete file at MCAF Tustin. The Proposed Plan/draft RAP was also distributed to the MCAF community relations mailing list.

Section 3 Highlights of Community Participation

Table 3-1
Summary of MCAF Tustin Updates, Fact Sheets, and Proposed Plans

Fact Sheet Number	Date	Title
–	02/93	The Environmental Cleanup of MCAS Tustin
2	06/94	New Environmental Committee to Hold Workshop
3	02/95	Soil Treatment Process Selected for Cleanup of Former Fuel Farm Area
4	12/95	It's Official: Excavation and Treatment of Contaminated Soil Is Under Way
5	01/96	Fast-Track Studies Focus on Reducing Cost and Schedule at MCAS Tustin
6	10/96	Proposed Plan for Landfill Trenches and Crash Crew Burn Pits
7	04/97	Cleanup Activities Complete at Former Fuel Tank Farm
8	10/97	Groundwater Contamination and Cleanup – An Overview
9	01/98	Identifying and Selecting Technologies and Alternatives for Groundwater Treatment
–	03/99	Recent Developments at Moffett Trenches and Crash Crew Burn Pits
–	01/00	Proposed Plan/Draft Remedial Action Plan for No Further Action at Three IRP Sites and Nine AOCs

Acronyms/Abbreviations:

AOC – area of concern
 IRP – Installation Restoration Program
 MCAF – Marine Corps Air Facility
 MCAS – Marine Corps Air Station

A public comment period was held from 02 to 31 January 2000. In addition, a public meeting was held on 13 January 2000. This meeting was announced in the *Tustin Weekly*, the *Orange County Register*, and *Los Angeles Times* (Orange County Edition) approximately 1 week prior to the public meeting. At this meeting, the BRAC Environmental Coordinator made a presentation about the IRP site/AOC conditions and the remedial alternatives under consideration. Representatives from the DON, MCAF Tustin, and environmental regulatory agencies were available to answer questions. A court reporter prepared a transcript of the meeting and was also available to record oral public comments. Responses to written comments received during the public comment period are included in the Responsiveness Summary, which is part of this ROD/RAP.

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Section 4

SCOPE AND ROLE OF OPERABLE UNIT

There are four OUs at MCAF Tustin. Each OU will be addressed in a separate ROD/RAP. OU-1 addresses groundwater at IRP-3, IRP-12, and IRP-13S. OU-2, addressed in this ROD/RAP, comprises IRP-2, IRP-9(A/B), and IRP-13E and AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03. OU-3 has been defined to address all contaminated media at the Moffett Trenches and Crash Crew Burn Pits Site (IRP-1). OU-4 comprises IRP-5, IRP-6, IRP-8, IRP-11, IRP-13W, and IRP-16 and AOCs DSS-01, DSS-02, MDA-02, MMS-04, MMS-05, and ST-67. OU-4 sites were initially recommended for no further action in the OU-1/OU-2 RI. This recommendation was later modified due to the presence of contaminants in groundwater at concentrations exceeding regulatory limits.

In addition to the sites included within the four OUs, there are three IRP sites that are not included in a designated OU:

- IRP-4 was designated for an RFA SV. Based on the results of the SV, this site was redesignated by the BCT as AOC MMS-03. AOC MMS-03 received a no further action determination by the BCT on 24 July 1997 (MCAS Tustin BCT 1997).
- IRP-7 was investigated in the RI. Based on the results of this investigation, the site was transferred out of the CERCLA process because of a petroleum exclusion. Contamination at this site is now being addressed under the Santa Ana RWQCB petroleum corrective action.
- IRP-15 was a purported disposal site for creosote-treated timber dating from 1942. Site inspections and document reviews failed to confirm the existence of this site, and it was eliminated from further study prior to the ESI. During a 20 March 1996 meeting of the BCT, it was agreed that IRP-15 required no further action, and a closure letter was signed by the members of the BCT. A copy of the closure letter is included in Appendix A of the ESI Report (BNI 1996a).

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Section 5

SITE CHARACTERISTICS

This section summarizes the regional characteristics of MCAF Tustin and results of the ESI, RFA, and RI investigations at each OU-2 site and AOC. This section also summarizes the results of non-time-critical removal actions at IRP-2 and IRP-9 and a RCRA action to remove soil at MWA-03. Each subsection below provides a brief history of the source of contamination at the IRP site or AOC, summarizes the sampling performed, and presents tables summarizing site-specific sampling results. Section 5 concludes with a discussion of current and potential future pathways of exposure to COPCs and a summary of the basewide groundwater study conducted in the RI. Section 6 presents the current and proposed future land uses and groundwater and surface water uses. Section 7 discusses the results of the risk assessments that were performed at each site/AOC and the follow-on evaluations conducted during the RI. A complete discussion of sampling locations and methodologies, compounds detected at each site, nature and extent of contamination, fate and transport modeling, and evaluation of human and ecological risks appears in the ESI, RFA, and RI reports referenced above.

The interpretation of the nature and extent of contamination at the OU-2 IRP sites/AOCs is based on data from the final ESI Report (BNI 1996a), the final RFA Report (BNI 1997b), and the final RI Report for OU-1 and OU-2 (BNI 1997a), the draft Closure Report for IRP-2 (OHM 1998a), the draft No Further Action Report for MWA-03 (OHM 1998b), the final PAH Apron Study Report (BNI 1998), and draft Closure Report for IRP-9 (OHM 2000a). The ESI, RFA, and RI reports include the results of field investigations, aerial photograph reviews, fate and transport modeling, and interviews with MCAF Tustin personnel. The remaining reports include the results of investigations and activities performed subsequent to the ESI, RFA, and RI.

5.1 REGIONAL CHARACTERISTICS

MCAF Tustin lies at the eastern edge of a broad coastal plain (an essentially planar, alluviated flatland) that is bounded on the east-northeast by the gentle slopes of Lomas de Santiago (along the foothills of the Santa Ana Mountains) and on the south by the San Joaquin Hills. The coastal plain slopes gently southwestward to the Pacific Ocean. The installation is essentially flat and has a mean elevation of approximately 54 feet above mean sea level (MSL). Ground elevation reaches a maximum of about 75 feet above MSL at the northern corner of the installation and gradually slopes to about 45 feet above MSL at the southern portion. The geology, hydrogeology, and surface hydrogeology are described below.

5.1.1 Geology and Hydrogeology

In the vicinity of MCAF Tustin, the coastal plane overlies are approximately 1,300 feet of unconsolidated sediments. Sediments from ground surface to depths ranging from approximately 90 feet to 150 feet below ground surface (bgs) consist of massive silt, clayey silt, clay, and silty clay deposits with laterally discontinuous lenses of sand and gravel. Collectively, the permeable water-bearing sediments of the floodplain and fluvial deposits within the upper 90 to 150 feet bgs are referred to as the "shallow aquifer." Below 150 feet bgs, these sediments are referred to as the "regional aquifer" (Figure 5-1).

Three water-bearing zones (WBZs) constitute the shallow aquifer beneath MCAF Tustin. These WBZs are identified by the depth intervals at which they occur and may or may not contain permeable sediments. The first WBZ occurs from approximately 5 to 30 feet bgs (Figure 5-2). The second WBZ occurs from approximately 30 to 60 feet bgs, and the third WBZ occurs from approximately 60 feet bgs to between 90 and 120 feet bgs. The boundary between WBZs varies from location to location, reflecting the lateral and vertical discontinuity of the relatively permeable sediments within each depth range.

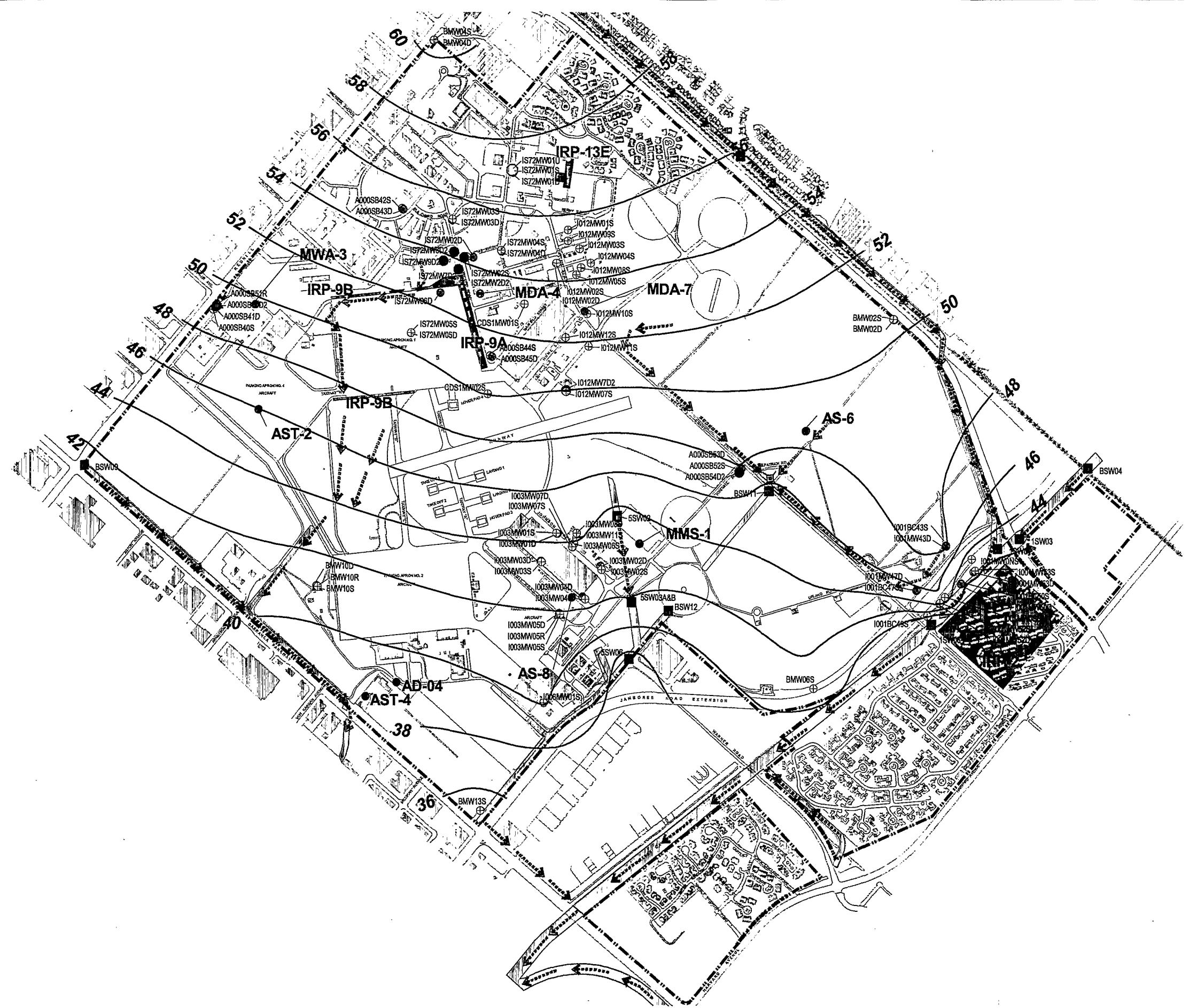
The fluvial deposits within the first WBZ are almost always saturated. The relatively fine-grained floodplain deposits within the first WBZ can be saturated, and at some locations, groundwater first occurs within the fine-grained deposits. Lateral decreases in the permeability of the floodplain deposits can result in semiconfined groundwater conditions within the first WBZ. Groundwater within the first WBZ contains total dissolved solids (TDS) at high levels, typically greater than 3,000 parts per million. Field data suggest that the first WBZ and second WBZ are hydraulically interconnected. However, TDS concentrations in the second WBZ are typically lower than in the first WBZ. Groundwater within the second and third WBZs generally occurs under semiconfined conditions. Field data also suggest that the third WBZ is usually separated hydraulically from the second WBZ and appears to be a transitional zone between the shallow aquifer and the underlying regional aquifer.

Groundwater flow within the three WBZs is monitored at cluster monitoring well locations throughout MCAF Tustin. With the exception of localized, relatively minor variations in direction and gradient, the first and second WBZs flow in the same general direction, generally toward the south, except in the vicinity of Peters Canyon Channel and San Diego Creek. In the vicinity of these drainages, groundwater flows toward the drainages. Groundwater within the third WBZ is not influenced by the drainages and flows south-southwest.

The vertical groundwater flow potential between permeable units is described by vertical gradients. Vertical gradients are calculated from groundwater elevation data from wells corresponding to the first, second, and third WBZs within the shallow aquifer and between wells within the shallow and regional aquifers. Within the shallow aquifer, there is an upward flow potential near Peters Canyon Channel, Barranca Channel, and Santa Ana-Santa Fe Channel. Away from the influence of the surface channels, there is either a slight downward or no vertical flow potential among the three WBZs of the shallow aquifer. There is potential for downward flow between monitoring wells screened in the shallow aquifer and the regional aquifer.

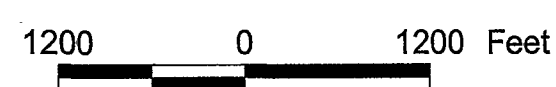
5.1.2 Surface Hydrogeology

MCAF Tustin is located within the Los Angeles drainage basin. Surface waters in the Los Angeles drainage basin consist typically of small streams, flood channels, and water-storage reservoirs. San Diego Creek, Peters Canyon Channel, Barranca Channel, Santa Ana-Santa Fe Channel, and San Joaquin Ditch typically contain water year-round

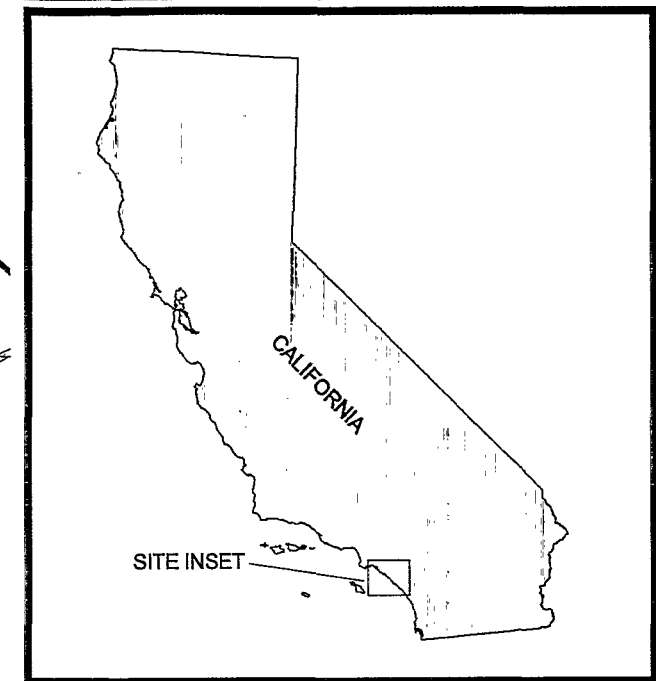
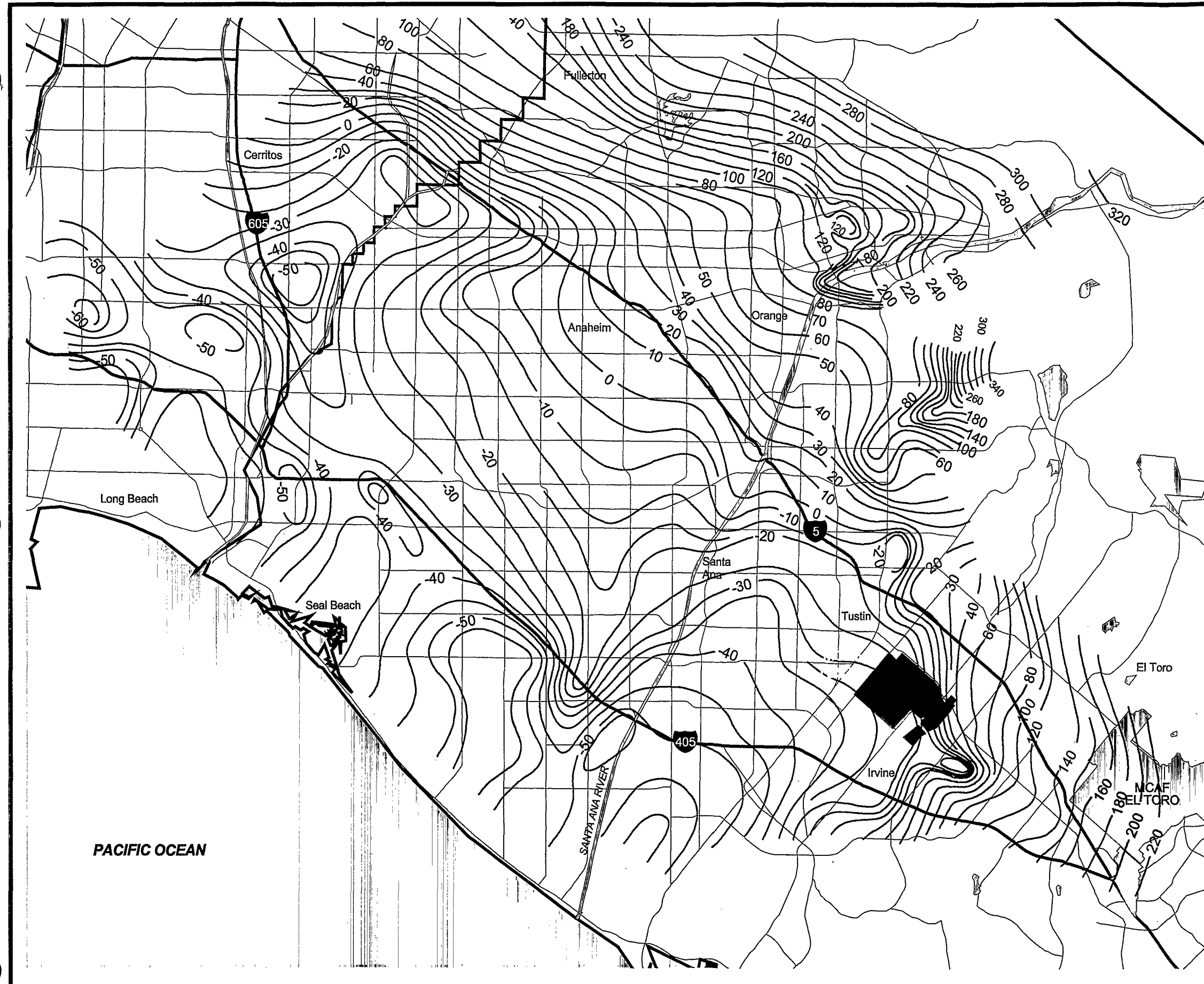


- LEGEND:**
- IS72MW01U WELL INSTALLED IN THE UPPER CONFINING CLAY
 - ⊙ BMW09S WELL INSTALLED IN 1st PERMEABLE WATER-BEARING ZONE OR IN OVERLYING FINER GRAINED ZONE CROSSING WATER TABLE (SHALLOW)
 - BMW02D WELL INSTALLED IN 2nd PERMEABLE WATER-BEARING ZONE (DEEP)
 - BMW03D2 WELL INSTALLED IN 3rd PERMEABLE WATER-BEARING ZONE (DEEPER)
 - ▲ A000SB49R WELL INSTALLED IN THE REGIONAL AQUIFER
 - BSW01 BASESIDE SURFACE WATER SAMPLING OR GAUGING LOCATIONS
 - EQUIPOTENTIAL LINE
 - GOVERNMENT PROPERTY LINE
 - EXISTING ROAD OR PAVED AREA
 - SURFACE CHANNELS
 - OPERABLE UNIT 2
 - BUILDING OR STRUCTURE
 - RAILROAD
 - FENCE
 - SURFACE CHANNEL FLOW DIRECTION

SOURCE:
 BASE MAP BASED ON AERIAL SURVEY CONDUCTED
 BY AIRBORNE SYSTEMS, INC. ON OCTOBER 21, 1990.
 REVISED BY BECHTEL TO REFLECT CURRENT
 CONDITIONS, NOVEMBER 1997.



Record of Decision / Remedial Action Plan	
Figure 5-1	
Basewide Water-Level Contour Map in the First WBZ (September 1999)	
Marine Corps Air Facility Tustin, California	
Bechtel National, Inc. CLEAN II Program	Date: 03/7/00 File No.: 141H4886 Job No.: 22214-141 Rev No.: C



LEGEND

- 20— GROUNDWATER ELEVATION CONTOUR (FEET MSL)
- MCAF TUSTIN BOUNDARY
- MCAS EL TORO BOUNDARY

SOURCE:

ORANGE COUNTY WATER DISTRICT (OCWD) 1999.



12500 0 12500 Feet

Record of Decision / Remedial Action Plan Figure 5-2 Groundwater Contour Map (Regional Aquifer) November 1998	
Marine Corps Air Facility, Tustin, California	
Bechtel National, Inc. CLEAN II Program	Date: 03/6/00 File No.: 141H4885 Job No.: 22214-141 Rev No.: D

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(Figure 5-3). San Diego Creek is southeast of the installation and flows southwest into Newport Bay. Three man-made channels bound MCAF Tustin: Barranca Channel to the south, Santa Ana-Santa Fe Channel to the north, and Peters Canyon Channel to the east. Incised about 10 to 20 feet below the surrounding land surface, these channels are unlined, thus permitting flow between groundwater and surface water. Data obtained during the RI indicate that in the vicinity of MCAF Tustin, both Barranca and Peters Canyon channels are "gaining" streams in the reach of MCAF Tustin, while Santa Ana-Santa Fe Channel loses water in its western reach and gains in the eastern reach. San Joaquin Ditch is a main on-site drainage ditch, portions of which have been designated as U.S. Army Corps of Engineers (USACOE) jurisdictional wetlands. San Joaquin Ditch collects stormwater and irrigation runoff water in the central and eastern portions of MCAF Tustin and discharges into Peters Canyon Channel through a conduit beneath Barranca Parkway.

Surface drainage is controlled by the local topography and by various man-made drainage facilities. Surface runoff at MCAF Tustin originates almost entirely from the installation, because surface runoff upgradient of the base to the northeast is intercepted by ditches parallel to the Santa Fe railroad tracks along the northeast side of the base. Surface runoff of excess precipitation and irrigation return flow leaves the installation in two ways: through the underground storm drainage system or through open ditches and channels. Peters Canyon Channel and Barranca Channel receive surface runoff and storm drain discharge from MCAF Tustin.

In general, surface-water flow is to the south and southwest, away from MCAF Tustin; however, along two edges of the installation, Santa Ana-Santa Fe Channel and Barranca Channel carry flow southeast toward Peters Canyon Channel. Short ditches along the Santa Fe railroad tracks and along Warner Avenue and a culvert beneath Edinger Avenue carry flow northwest toward Peters Canyon Channel. Peters Canyon Channel receives runoff from Santa Ana-Santa Fe Channel on the northeast side and from San Joaquin Ditch in the center of the installation. Peters Canyon Channel merges with San Diego Creek approximately 1 mile southwest of MCAF Tustin. Barranca Channel merges with San Diego Creek approximately 2 miles southwest of the base. San Diego Creek empties into upper Newport Bay approximately 5 miles southwest of the base.

A floodplain is designated on the eastern side of MCAF Tustin (Figure 5-3). It represents the 100-year shallow flooding zone of the adjacent channels, not the flooding due to surface runoff from the installation. Floodwater depths for the 100-year floodplain encroachment are estimated at 1 to 3 feet. Floodwaters at the facility would be contained in Peters Canyon Channel (BNI 2000).

5.2 EXPANDED SITE INSPECTION SITES

IRP-2 and IRP-9 were included in the ESI. The ESI was conducted for these sites because previous investigations concluded that these sites did not present a significant threat to human health and/or the environment, and the site-specific information collected during previous investigations did not warrant an investigation of the magnitude usually

specified in an RI. However, to facilitate closure of MCAF Tustin in 1999, the ESI was conducted similar to an RI to ensure that sufficient information was collected to allow each site to be recommended for no further action. The ESI included a review of pertinent background information, performance of field investigations (including collection and analysis of soil and groundwater samples), evaluation of data (including a leaching evaluation and groundwater modeling), and assessment of potential human-health risks. A draft ESI report was prepared and reviewed by the Navy, regulatory agencies (DTSC, U.S. EPA, and RWQCB), and the RAB. Revisions were made to the draft final ESI Report in accordance with the comments on the draft ESI; responses to the reviewer comments were included as an attachment to the draft final ESI (BNI 1996a). The activities and the results of the ESI with respect to IRP-2 and IRP-9 are summarized below.

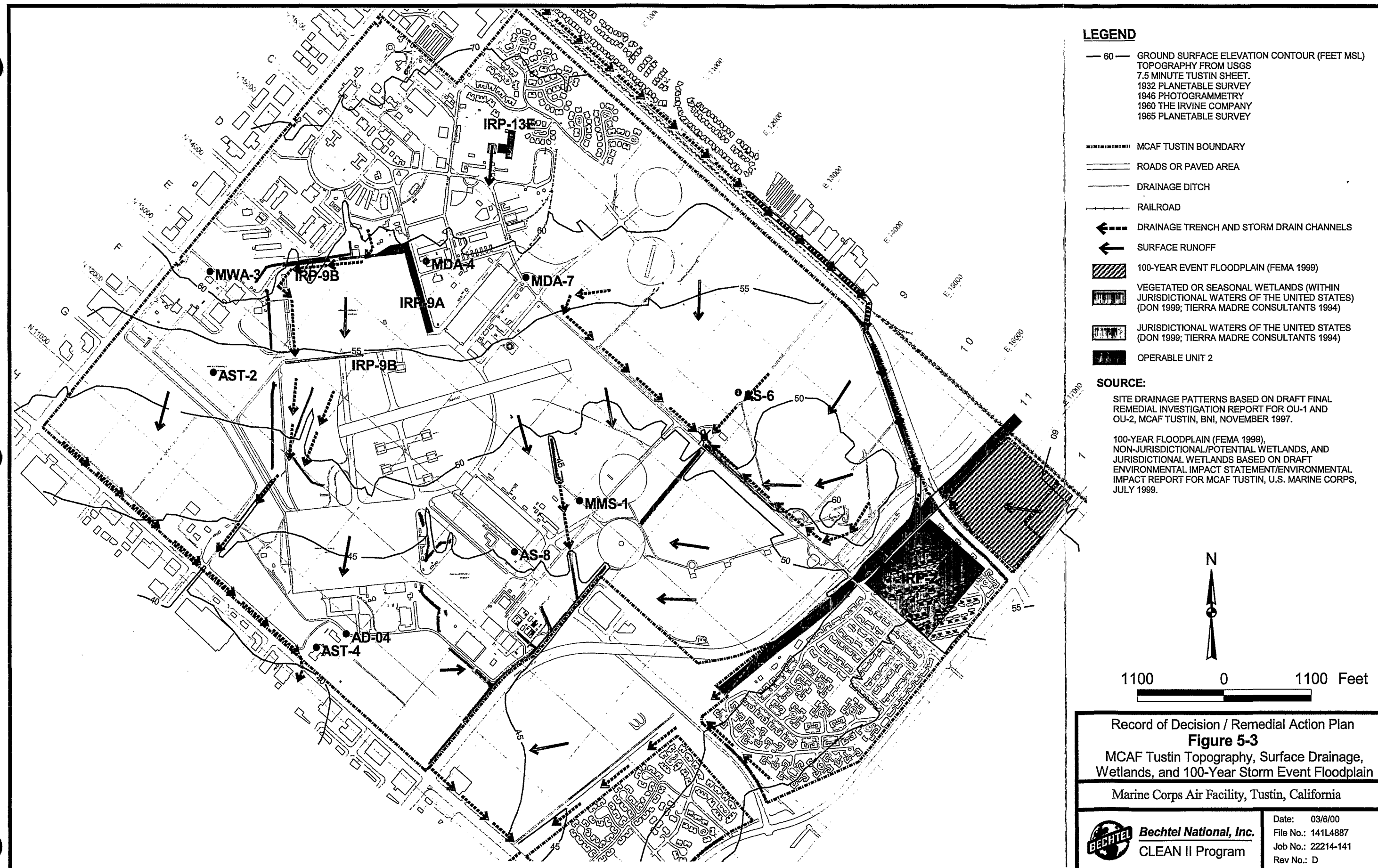
5.2.1 IRP-2, Oil Disposal Area

IRP-2 is located in the northeastern portion of MCAF Tustin. The site is a former oil disposal area that reportedly operated from approximately 1970 to 1981. In the late 1970s, a pistol range was located in the southeastern portion of the site, and a skeet and trap shooting range was located approximately 100 yards north of the pistol range. As-built drawings from 1979 indicated a fuel storage tank at the pistol range and a pad-mounted transformer at the skeet and trap shooting range. Prior to closure, 278 housing units and various recreational facilities (e.g., tennis, handball, basketball courts) occupied the site.

Historical information indicates that wastes were poured or sprayed onto the ground surface at IRP-2 from the back of a moving truck. It was reported that, from 1970 to 1981, an estimated 4,400 to 6,600 gallons of waste oil was discharged directly to the unpaved soil at IRP-2. The waste oil contained jet propellant – Grade 5 (JP-5), crankcase oil, hydraulic fluid, and solvents (Jacobs Engineering 1993a).

During the SI, soil gas, soil, and groundwater samples were collected and analyzed across the site (Jacobs Engineering 1993a). A total of 30 soil gas samples were analyzed for volatile organic compounds (VOCs), and 12 near-surface soil samples (including 2 duplicates) and 4 HydroPunch® groundwater samples were selected randomly over an area identified on aerial photographs and in areas of stressed vegetation. Soil and groundwater samples were analyzed for VOCs, total petroleum hydrocarbons (TPH) or total recoverable petroleum hydrocarbons (TRPH), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, and metals.

To augment the SI, the ESI included collecting additional samples from soil and groundwater. A total of 97 ESI soil samples were collected at depths ranging from 0.5 to 30 feet bgs: 78 of these samples were collected from near-surface soil (0 to 2.5 feet bgs), 8 from shallow soil (2.5 to 12.5 feet bgs), and 11 from deep soil (12.5 feet to the first WBZ). Saturated sands of the first WBZ were encountered from approximately 15 to



Section 5 Site Characteristics

34 feet bgs. Soil samples were analyzed for VOCs and TRPH at an on-site laboratory. Selected soil samples were also submitted to an off-site laboratory for additional analysis for VOCs, PCBs, polynuclear aromatic hydrocarbon (PAH) compounds, and target analyte list (TAL) metals plus molybdenum. Table 5-1 summarizes the results of soil sampling at IRP-2 and incorporates the results of the SI.

The nature and extent of COPCs in groundwater at IRP-2 were evaluated during the ESI based on analytical data for groundwater samples collected from three soil borings and four wellpoints. One wellpoint was located near the southeast corner of the site where selenium was detected in groundwater at a concentration exceeding the maximum contaminant level (MCL) during the 1991 SI. The other three wellpoints were located in a downgradient area of the site. Groundwater samples were analyzed on-site for VOCs. Samples from the wellpoints were also analyzed at an off-site laboratory for VOCs, PCBs, and TAL metals plus molybdenum. Sampling results from the SI and ESI were used to evaluate the nature and extent of COPCs in groundwater (Table 5-2).

The predominant COPCs reported in soil at IRP-2 were PAH compounds and metals. A localized area of elevated PAH concentrations (hot spot) in near-surface soil was identified on the southwestern side of IRP-2. Most metals in soil exceeded background concentrations only slightly and in only a few samples (less than 10 percent). The predominant COPCs reported in groundwater were metals. VOCs were not reported in groundwater. The geochemical evaluation conducted as part of the ESI indicated that metals in soil and groundwater were within the naturally occurring range and not the result of base operations. The leaching evaluation (vadose zone transport model) indicated that COPCs at IRP-2 would leach to groundwater at concentrations below the tap water preliminary remediation goals (PRGs).

Subsequent to the ESI, a non-time-critical removal action was conducted to remediate the hot spot at IRP-2. The results of the removal action are documented in a draft Closure Report (OHM 1998a). At IRP-2, soil was excavated to approximately 1 foot bgs and treated using an on-site thermal desorption unit. Following treatment, the excavated area was backfilled with the treated soil and compacted. Approximately 569 tons of PAH-contaminated soil were excavated 23–28 May 1997. For the removal action at IRP-2, the cleanup goal was established for the organic chemical of concern contributing the most to the total risk: benzo(a)pyrene at 61 micrograms per kilogram ($\mu\text{g}/\text{kg}$) (SWDIV 1997). This cleanup goal corresponds to a 1×10^{-6} level of cancer risk based on a residential exposure scenario. Based on confirmation soil sampling results (Table 5-3), the removal action objectives were met. Table 5-3 provides a summary of confirmation soil sampling conducted at IRP-2 following the non-time-critical removal action at that site.

Table 5-1
COPCs Reported in Soil at IRP-2 Oil Disposal Area
(prior to removal action)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	42/97	10	11 – 98	mg/kg	^a
VOCs	5/97	6 – 25	ND	µg/kg	^a
OFF-SITE LABORATORY RESULTS^b					
Volatile Organic Compounds					
Acetone ^c	7/20	12 – 51	5 – 11	µg/kg	^a
Ethylbenzene ^c	1/20	5.5 – 12	12	µg/kg	^a
Methylene chloride ^c	1/20	5.2 – 160	1.5	µg/kg	^a
Toluene ^c	1/20	5.2 – 12	5	µg/kg	^a
Trichloroethene ^c	3/20	5.2 – 12	2 – 3	µg/kg	^a
m,p-xylene ^c	1/3	5.5 – 6.2	170	µg/kg	^a
o-xylene ^c	1/3	5.5 – 6.2	68	µg/kg	^a
Total Recoverable Petroleum Hydrocarbons					
TRPH	4/7	25 – 38	25 – 630	mg/kg	^a
Polynuclear Aromatic Hydrocarbons					
Acenaphthene ^c	1/29	11 – 458.7	850	µg/kg	^a
Anthracene ^c	5/29	5.5 – 458.7	3.6 – 990	µg/kg	^a
Benz(a)anthracene ^c	7/29	5.5 – 458.7	3.3 – 2,700	µg/kg	^a
Benzo(a)pyrene ^c	7/29	5.5 – 458.7	8.3 – 1,400	µg/kg	^a
Benzo(b)fluoranthene ^c	9/29	11 – 458.7	6 – 1,800	µg/kg	^a
Benzo(k)fluoranthene ^c	9/29	5.5 – 458.7	2.8 – 800	µg/kg	^a
Chrysene ^c	7/29	5.5 – 458.7	1.9 – 3,900	µg/kg	^a
Fluoranthene ^c	10/29	11 – 458.7	4.5 – 6,800	µg/kg	^a
Fluorene ^c	1/29	11 – 5500	2.1	µg/kg	^a
Phenanthrene ^c	6/29	5.5 – 458.7	2.9 – 4,600	µg/kg	^a
Pyrene ^c	10/29	5.5 – 458.7	4.7 – 6,400	µg/kg	^a
Semivolatile Organic Compounds					
bis(2-ethylhexyl)phthalate ^c	7/12	356.4 – 400	43 – 360	µg/kg	^a
Butylbenzylphthalate ^c	2/12	356.4 – 458.7	62 – 95	µg/kg	^a
Dimethylheptadecane (TIC)	1/1	^d	220	µg/kg	^a
Naphthalene, 1,2,3,4-tetrahydro-1,8-dimethyl (TIC)	1/1	^d	310	µg/kg	^a

(table continues)

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Table 5-1 (continued)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels
Pentadecane (TIC)	1/1	^d	690	µg/kg	^a
Tribromophenol (TIC)	1/1	^d	120	µg/kg	^a
Pesticides					
4,4'-DDE ^c	3/12	17.44 – 22.08	22 – 28	µg/kg	^a
4,4'-DDT ^c	4/12	17.44 – 22.08	24 – 35	µg/kg	^a
Inorganic Analytes					
TAL Metals					
Aluminum ^c	44/44	200	5,340 – 39,700	mg/kg	36,300
Arsenic ^c	50/51	1.3	1.5 – 30.3	mg/kg	17.5
Cadmium ^c	24/51	0.87 – 1.4	0.91 – 4.6	mg/kg	1.8
Cobalt ^c	42/44	3.1 – 4.8	1.8 – 17.9	mg/kg	15.1
Copper ^c	51/51	0 – 25	4.8 – 67.8	mg/kg	41.5
Lead ^c	50/51	12.2	1.9 – 164	mg/kg	23.4
Manganese ^c	44/44	15	104 – 1,680	mg/kg	1,100
Mercury ^c	2/51	0.09 – 0.17	0.17 – 0.31	mg/kg	BDL
Molybdenum ^c	8/44	3.7 – 5.7	4.7 – 18.4	mg/kg	10.0
Nickel ^c	48/51	4.5 – 13.8	6.8 – 51.4	mg/kg	27.8
Silver ^c	1/51	0.29 – 1.4	1.2	mg/kg	BDL
Thallium ^c	10/51	0.22 – 1	0.31 – 1.7	mg/kg	1.60
Vanadium ^c	44/44	50	14 – 207	mg/kg	80.6
Zinc ^c	51/51	0 – 20	20.8 – 160	mg/kg	141

Notes:

- ^a background not calculated for organics and certain inorganics
- ^b analytes with maximum concentrations above background
- ^c COPC used to calculate risk
- ^d detection limits not calculated for TICs

Acronyms/Abbreviations:

- BDL – below detection limits
- COPC – chemical of potential concern
- DDE – dichlorodiphenyldichloroethene
- DDT – dichlorodiphenyltrichloroethane
- IRP – Installation Restoration Program
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- ND – not detected
- TAL – target analyte list
- TIC – tentatively identified compound
- TRPH – total recoverable petroleum hydrocarbons
- VOC – volatile organic compound

Table 5-2
COPCs Reported in Groundwater at IRP-2 Oil Disposal Area
 (units reported in micrograms per liter)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Background Levels
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS				
Volatile organic compounds	0/9	3 – 12.5	ND	^a
OFF-SITE LABORATORY RESULTS^b				
Total Petroleum Hydrocarbons				
TPH	3/4	50	83 – 290	^a
Semivolatile Organic Compound				
1,2-diiodoethane (TIC)	1/1	^d	16	^c
Inorganic Analytes				
TAL Metals				
Arsenic ^d	5/5	10 – 200	8.7 – 47.7	8.3
Cadmium ^d	1/5	4 – 5	4.4	2.5
Mercury ^d	1/5	0.2	0.24	BDL
Molybdenum ^d	5/5	200	348 – 3,310	BDL
Selenium ^d	4/5	3	3.8 – 366	326

Notes:

- ^a background not calculated for organics and certain inorganics
- ^b analytes with maximum concentrations above groundwater background
- ^c detection limits not calculated for TICs
- ^d COPC used to calculate risk

Acronyms/Abbreviations:

- BDL – below detection limits
- COPC – chemical of potential concern
- IRP – Installation Restoration Program
- ND – not detected
- TAL – target analyte list
- TIC – tentatively identified compound
- TPH – total petroleum hydrocarbons

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Table 5-3
Summary of Analytical Results for Confirmation Soil Sampling at IRP-2
 (results reported in micrograms per kilogram)

Analyte	Frequency of Detection	Detection Limits	Range of Concentrations	1995/1996 Residential PRG
Polynuclear Aromatic Hydrocarbons				
Benz(a)anthracene	4/25	8.4 – 45	8.9 – 63	610
Benzo(a)pyrene	7/25	8.4 – 45	8.9 – 54	61
Benzo(b)fluoranthene	1/25	17 – 91	48	610
Benzo(k)fluoranthene	2/25	8.4 – 45	16 – 25	610
Benzo(g,h,i)perylene	1/25	17 – 91	39	NE
Chrysene	4/25	8.4 – 45	12 – 78	6,100
Fluoranthene	5/25	17 – 91	19 – 170	2,600,000
Indeno(1,2,3-c,d)pyrene	1/25	8.4 – 44	36	610
Phenanthrene	3/25	8.4 – 45	8.5 – 130	NE
Pyrene	4/25	8.4 – 45	9.4 – 69	100,000

Source:
OHM 1998b

Acronym/Abbreviation:
 IRP – Installation Restoration Program
 NE – not established
 PRG – preliminary remediation goal

5.2.2 IRP-9, Hangar No. 1 Line Shacks and Apron 1

IRP-9 consists of two general areas, IRP-9A and IRP-9B, located in the northwestern portion of MCAF Tustin. IRP-9A is an unpaved area north of Aircraft Parking Apron 1 and south of McCord Road that contained line shacks and temporary hazardous substance storage units (the line shacks are still present). The site consists of a strip of land approximately 85 feet wide by 1,000 feet long. The site stretches along the northern edge of Aircraft Parking Apron 1 and contains five line shacks (Buildings 207, 260, 178, 179, and 261) for use by helicopter maintenance crews and a metal building (Building 201). IRP-9B consists of two areas along the Apron 1 margin, one on the northwest site (Subarea 1) and one on the southeast side (Subarea 3), which were impacted by helicopter exhaust transported to the margins by rainwater runoff.

The SI (Jacobs Engineering 1993a) and ESI (BNI 1996a) focused on IRP-9A. These investigations identified 38 COPCs in the soil at IRP-9A, including PAHs, VOCs, TRPH, TPH, PCBs, and metals. Tables 5-4 and 5-5 summarize the results of soil and groundwater sampling, respectively, at IRP-9A prior to conducting a removal action at

Table 5-4
COPCs Reported in Soil at IRP-9A Hangar No. 1 Line Shacks^a
(prior to removal action)

Analyte	Frequency of Detection	Detection Limits	Range of Concentrations	Units	Background Levels
OFF-SITE LABORATORY RESULTS^b					
Volatile Organic Compounds					
Acetone	8/34	10 – 53	9.2 – 21	µg/kg	^c
Bromochlorodifluoromethane (TIC)	1/1	^d	39	µg/kg	^d
1,2-dichlorobenzene	2/17	5.2 – 1,815	1.3 – 1.9	µg/kg	^c
1,4-dichlorobenzene	1/17	5.2 – 1,815	2	µg/kg	^c
Methyl ethyl ketone	1/34	10 – 13	1.5	µg/kg	^c
Methylene chloride	1/34	5.2 – 110	1.5	µg/kg	^c
Toluene	5/34	5.2 – 13	2.5 – 16	µg/kg	^c
Freon 11	1/13	5.2 – 6.7	1.3	µg/kg	^c
m,p-xylene	3/13	5.2 – 6.7	1.6 – 6.2	µg/kg	^c
o-xylene	2/13	5.2 – 6.7	1.8 – 2.4	µg/kg	^c
Total Recoverable Petroleum Hydrocarbons					
TPH	1/5	10 – 100	92	mg/kg	^c
TPH (JP-5)	1/5	10 – 100	880	mg/kg	^c
Polynuclear Aromatic Hydrocarbons					
Acenaphthene	2/37	12 – 12,000	58 – 1,200	µg/kg	^c
Anthracene	15/37	2.4 – 745.8	0.53 – 790	µg/kg	^c
Benz(a)anthracene	5/37	2.4 – 2,300	4.2 – 7,700	µg/kg	^c
Benzo(a)pyrene	23/37	2.4 – 48	5.7 – 6,800	µg/kg	^c
Benzo(b)fluoranthene	18/37	2.4 – 1,815	5.3 – 5,100	µg/kg	^c
Benzo(g,h,i)perylene	3/37	2.4 – 2,300	210 – 3,400	µg/kg	^c
Benzo(k)fluoranthene	23/37	2.4 – 48	2.1 – 3,300	µg/kg	^c
Chrysene	21/37	2.4 – 359.7	2.3 – 6,000	µg/kg	^c
Dibenzo(a,h)anthracene	4/37	2.4 – 2,300	12 – 1,100	µg/kg	^c
Fluoranthene	21/37	2.4 – 745.8	5.2 – 7,900	µg/kg	^c
Indeno(1,2,3-c,d)pyrene	2/37	2.4 – 2,300	180 – 3,400	µg/kg	^c
Phenanthrene	21/37	2.4 – 745.8	3.8 – 3,400	µg/kg	^c
Pyrene	24/37	2.4 – 48	1.2 – 9,500	µg/kg	^c

(table continues)

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Table 5-4 (continued)

Analyte	Frequency of Detection	Detection Limits	Range of Concentrations	Units	Background Levels
Semivolatile Organic Compounds					
bis(2-ethylhexyl)phthalate	3/4	745.8	170 – 3,000	µg/kg	^c
Benzofluoranthene (TIC)	3/3	^d	230 – 7,700	µg/kg	^d
Benzonaphthothiophene (TIC)	1/1	^d	1,800	µg/kg	^d
di-n-butyl phthalate	1/4	359.7 – 1,815	130	µg/kg	^d
Dimethyl phenanthrene (TIC)	1/1	^{bd}	2,000	µg/kg	^d
Methylpyrene (TIC)	2/2	^{bd}	2,400 – 2,900	µg/kg	^d
Pesticides					
4,4'-DDE	1/4	17.44 – 18.08	20	µg/kg	^c
TAL Metals					
Antimony	3/35	0.41 – 6	0.93 – 1.5	mg/kg	1.4
Arsenic	38/38	0 – 10	1 – 17.9	mg/kg	17.5
Barium	34/34	200	64.1 – 408	mg/kg	305
Cadmium	7/38	0.85 – 1.4	1 – 2.2	mg/kg	1.8
Copper	38/38	0 – 25	5.1 – 203	mg/kg	41.5
Lead	38/38	0 – 3	4.2 – 78.6	mg/kg	23.4
Mercury	3/38	0.09 – 0.14	0.14 – 0.17	mg/kg	BDL
Nickel	38/38	0 – 40	4.4 – 28.5	mg/kg	27.8
Silver	2/38	0.2 – 1.1	0.79 – 0.82	mg/kg	BDL
Thallium	2/38	0.17 – 1	0.76 – 1.8	mg/kg	1.60
Zinc	38/38	0 – 20	22.3 – 816	mg/kg	141
Inorganics					
Cyanide	1/4	0.55 – 0.57	16.8	mg/kg	^{a,c}

Notes:

- ^a off-site laboratory results
- ^b analytes with maximum concentrations above background
- ^c background not calculated for organics and certain inorganics
- ^d detection limits not calculated for TICs

Acronyms/Abbreviations:

BDL – below detection limits
 COPC – chemical of potential concern
 DDE – dichlorodiphenyldichloroethene
 IRP – Installation Restoration Program
 JP-5 – jet propellant – Grade 5
 µg/kg – micrograms per kilogram
 mg/kg – milligrams per kilogram
 TAL – target analyte list
 TIC – tentatively identified compound
 TPH – total petroleum hydrocarbons

Table 5-5
COPCs Reported in Groundwater at IRP-9A Hangar No.1 Line Shacks^a
 (units reported in micrograms per liter)

Analyte	Frequency of Detection	Detection Limits	Range of Concentrations	Background Levels
ON-SITE AND OFF-SITE LABORATORY RESULTS^b				
Volatile Organic Compounds				
Acetone	2/7	10	4.1 – 5	^c
1,2-dichlorobenzene	1/5	5 – 10	1.1	^c
1,4-dichlorobenzene	1/5	5 – 10	1	^c
Freon 113 (TIC)	2/2	^d	21 – 26	^c
Freon 113 (TIC)	2/2	^d	13 – 20	^c
Methylene chloride	3/7	5 – 10	5 – 27	^c
1,1,2,2-tetrachloroethane	1/7	5 – 10	2.1	^c
Trichloroethene	3/7	5 – 10	1.7 – 9	^c
Total Recoverable Petroleum Hydrocarbons				
TPH (JP-5)	1/3	50	250	^c

Notes:

- ^a on-site and off-site laboratory results
- ^b analytes with maximum concentrations above background
- ^c background not calculated for organics and certain inorganics
- ^d detection limits not calculated for TICs

Acronyms/Abbreviations:

- COPC – chemical of potential concern
- IRP – Installation Restoration Program
- JP-5 – jet propellant – Grade 5
- TIC – tentatively identified compound
- TPH – total petroleum hydrocarbons

that site. The ESI risk assessment indicated that these COPCs posed a potential risk to human health at the site. Based on the results of the risk assessment, remediation of shallow soil in two small areas within IRP-9A was recommended (BNI 1996h).

The nature and extent of COPCs in groundwater from the first permeable WBZ at IRP-9A were evaluated during the ESI using EnviroCore or HydroPunch sampling methods. Eighteen samples were collected by the EnviroCore method and analyzed by the on-site laboratory, and five samples including one duplicate sample were collected by HydroPunch and analyzed by the on-site and off-site laboratory. All samples were analyzed by the on-site laboratory for VOCs. HydroPunch samples were also analyzed at an off-site laboratory for metals and VOCs. Table 5-4 summarizes the results of on-site and off-site laboratory data and incorporates the results of the SI.

The predominant COPC reported in groundwater was trichloroethene (TCE). The highest TCE concentration (9 micrograms per liter) occurred under the southeast portion of the

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site and does not correlate with soils data (i.e., TCE was not reported in soil samples). However, IRP-9 is located in an area both adjacent to and overlying part of a large VOC plume that originates at OU-1, IRP-13S. Therefore, groundwater at IRP-9 is being addressed as part of the remedial action that is planned for OU-1. The potential for future impacts to groundwater from residual concentrations of COPCs in soil was evaluated as part of the fate and transport analysis. The leaching evaluation conducted as part of the ESI indicated that 12 COPCs in soil had the potential to impact groundwater at concentrations exceeding the MCLs and/or PRGs. Groundwater modeling conducted in the RI was used to verify the leaching evaluation. Modeling indicated that cyanide may impact groundwater above its MCL in the future. The area containing the cyanide was recommended for a non-time-critical removal action.

During a RCRA removal action at Sites ST-47A and ST-47B in the northwestern corner of Apron 1, excavation-related sampling and analytical results suggested that elevated levels of PAHs extended beyond the northern boundary of IRP-9A, along the northwestern edge of Apron 1. In general, the highest PAH concentrations were detected in shallow soil (upper 0.5 feet) closest to the edge of Apron 1 (BNI 1998). Sampling along the margin showed a decrease in PAH concentrations by an order of magnitude at a depth of only 0.5 feet. Table 5-6 summarizes the results of soil sampling at IRP-9B prior to conducting a non-time-critical removal action at that site.

Based on the distribution and concentrations of PAHs in the IRP-9A and IRP-9B samples (and additional samples collected along the northwestern margin of Apron 1), the conceptual model considered most accurate in explaining the PAH release is that PAHs along the apron margins originated from emissions from the combustion of fuels in helicopter engines that were deposited on the apron and subsequently transported off the apron via runoff of washwater or rainwater (BNI 1998). The runoff would dissipate relatively rapidly and seep into the soil, leaving behind the PAHs, which tend to bind to soil. The conceptual model for the release of PAHs was confirmed based on the distribution and concentrations of PAHs in surface soil surrounding the aprons. TPH is likely to have originated from the same source as the PAHs given the low concentrations (typically below 1,000 milligrams per kilogram [mg/kg]). Based on the distribution, magnitude, and geographic location of PAHs at each apron, perimeter surface soil was divided into subareas. These subareas were identified for the screening risk assessment so that remedial actions, if necessary, could be developed for relatively localized areas. A human health screening risk assessment, based on the 1998 U.S. EPA Region IX PRGs for residential soil, was conducted for each of the apron subareas (BNI 1998). As a result of the screening risk assessment, Apron 1 Subareas 1 and 3 (IRP-9B) were estimated to pose cancer risk levels exceeding 1×10^{-4} and, thus, were recommended for a non-time-critical removal action.

Non-time-critical removal actions were conducted to remediate IRP-9A and IRP-9B. The removal actions addressed PAH compounds in the soil because PAH compounds were determined to be the primary risk drivers at IRP-9A and IRP-9B (BNI 1996a and 1998).

Table 5-6
COPCs Reported in Soil at IRP-9B Apron 1^a
(prior to removal action)

Analyte Name	Frequency of Detection	Range of Concentrations	Units	Background Levels
Polynuclear Aromatic Hydrocarbons				
Acenaphthylene	12/39	34 – 2,200	µg/kg	b
Acenaphthene	4/39	32 – 170	µg/kg	b
Anthracene	20/39	9 – 4,000	µg/kg	b
Benz(a)anthracene	35/39	7 – 8,300	µg/kg	b
Benzo(b)fluoranthene	32/39	19.4 – 17,000	µg/kg	b
Benzo(a)pyrene	38/39	18.5 – 10,000	µg/kg	b
Benzo(g,h,i)perylene	33/39	18.9 – 4,700	µg/kg	b
Benzo(k)fluoranthene	29/29	9.7 – 3,000	µg/kg	b
Chrysene	38/39	10.9 – 12,000	µg/kg	b
Dibenz(a,h)anthracene	15/39	10 – 1,900	µg/kg	b
Fluorene	13/39	2 – 1,000	µg/kg	b
Fluoranthene	38/39	19.4 – 15,000	µg/kg	b
Indeno(1,2,3-c,d)pyrene	34/39	7.1 – 4,900	µg/kg	b
Naphthalene	2/39	60 – 70	µg/kg	b
Phenanthrene	37/39	10.7 – 16,000	µg/kg	b
Pyrene	37/39	13 – 24,000	µg/kg	b
Total Petroleum Hydrocarbons				
Hydrocarbons	14/15	40 – 1,440	mg/kg	b

Note:

- ^a off-site laboratory results
- ^b background levels not calculated for organics

Acronyms/Abbreviations:

COPC – chemical or potential concern
 IRP – Installation Restoration Program
 µg/kg – micrograms per kilogram
 mg/kg – milligrams per kilogram

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Although metals in a few samples from IRP-9A exceeded PRGs, the concentrations were determined to be predominantly within the range of naturally occurring variations of soil concentrations (BNI 1996a). The results of the removal action are documented in a draft final Closure Report dated 18 May 2000 (OHM 2000a). At IRP-9(A/B), soil was excavated to an average depth of between 1 and 1.5 feet bgs and treated using an on-site desorption unit. Following treatment, the excavated area was backfilled with the treated soil and compacted. Approximately 700 tons and 6,827 tons of PAH-contaminated or TPH-contaminated soil were excavated from IRP-9A and IRP-9B, respectively. The removal action was conducted at IRP-9A between 10 July 1997 and 04 September 1997 and the removal action was conducted at IRP-9B between 14 October 1998 and 05 January 1999. Tables 5-7 through 5-9 summarize the results of confirmation sampling conducted following soil removal. For the removal action at IRP-9, the cleanup goals selected for organic COPCs that are the greatest contributors to the total risk were the residential PRGs. These cleanup goals correspond to a 1×10^{-6} level of cancer risk, although allowable risk is considered to be up to 1×10^{-4} , and a noncancer risk (hazard index) of less than 1. Based on the sampling results, the cleanup goals were met at IRP-9A and IRP-9B. Excess cancer risks and noncancer risks were calculated for IRP-9A and IRP-9B following soil removal. The results indicate that the noncancer risks for resident adults, children, and industrial workers were less than 1.0 for both IRP-9A and IRP-9B. Under these scenarios, the total cancer risk ranged between 1×10^{-6} and 4×10^{-6} for IRP-9A and between 7×10^{-7} and 2×10^{-6} for IRP-9B. These risk values are within the allowable range defined by U.S. EPA for unrestricted residential or industrial use. The risk assessments for IRP-9A and IRP-9B are discussed further in Section 7.

5.3 RFA AOCs

The no action AOCs were included in the RFA. The RFA was conducted for these sites to investigate the presence of COPCs at the AOCs, conduct screening risk assessments, and perform fate and transport analyses. The results of the risk assessment and the fate and transport analyses were used to develop recommendations for further action or evaluation, if needed. Once field samples were collected and laboratory analytical results were obtained, risk levels were calculated based on potential human exposure to COPCs in soil and groundwater. The risk assessment action levels were based on the NCP criteria stating that:

- no action is needed where cancer risk probabilities are less than 1×10^{-6} (one in one million) and the hazard index is less than 1.0 and
- action is needed where cancer risk probabilities exceed 1×10^{-4} (100 in one million) and the hazard index is greater than 1.0.

For the RFA Report, a risk management decision based on site-specific information was used to recommend further evaluation if the cancer risk probabilities were between 1×10^{-4} and 1×10^{-6} . A draft final RFA Report was issued in April 1997 (BNI 1997b). The activities and the results of the RFA with respect to the no action AOCs are summarized below.

Table 5-7
Summary of Confirmation Soil Sampling at IRP-9A – Subareas 1 and 2
 (units reported in micrograms per kilogram)

Analyte	Frequency of Detection	Detection Limits	Range of Detected Concentrations	1998 Residential PRG
Polynuclear Aromatic Hydrocarbons				
Acenaphthene	0/56	250 – 1,300	NA	2,600,000
Acenaphthylene	0/56	500 – 2,600	NA	NE
Anthracene	0/56	25 – 130	NA	14,000,000
Benz(a)anthracene	6/56	25 – 130	27 – 66	560
Benzo(a)pyrene	14/56	25 – 130	34 – 190	56
Benzo(b)fluoranthene	3/56	50 – 260	56 – 110	560
Benzo(g,h,i)perylene	4/56	50 – 260	67 – 120	NE
Benzo(k)fluoranthene	9/56	25 – 130	26 – 99	56,000
Chrysene	13/56	25 – 130	27 – 150	6,100
Dibenz(a,h)anthracene	0/56	50 – 260	NA	56
Fluoranthene	10/56	50 – 260	52 – 250	2,000,000
Fluorine	0/56	50 – 260	NA	1,800,000
Indeno(1,2,3-c,d)pyrene	13/56	25 – 130	29 – 120	560
Naphthalene	0/56	250 – 1,300	NA	55,000
Phenanthrene	5/56	25 – 130	26 – 120	NE
Pyrene	9/56	25 – 130	32 – 130	1,500,000

Acronyms/Abbreviations:

IRP – Installation Restoration Program

NA – not analyzed

NE – not established

PRG – preliminary remediation goal

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Table 5-8
Summary of Confirmation Soil Sampling at IRP-9B – Subarea 1
 (units reported in micrograms per kilogram)

Analyte	Frequency of Detection	Detection Limits	Range of Detected Concentrations	1998 Residential PRG
Polynuclear Aromatic Hydrocarbons				
Acenaphthene	1/223	260 – 15,000	572	2,600,000
Acenaphthylene	4/223	520 – 31,000	76 – 99	NE
Anthracene	26/223	26 – 300	2.4 – 260	14,000,000
Benz(a)anthracene	66/223	26 – 290	2.82 – 733	560
Benzo(a)pyrene	86/223	26 – 290	3.01 – 873	56
Benzo(b)fluoranthene	96/223	52 – 65	3 – 595	560
Benzo(g,h,i)perylene	42/223	52 – 3,100	5.7 – 700	NE
Benzo(k)fluoranthene	62/223	26 – 1,500	1.22 – 320	56,000
Chrysene	101/223	26 – 32	2.1 – 1,600	6,100
Dibenz(a,h)anthracene	47/223	52 – 3,100	3.0 – 570	56
Fluoranthene	81/223	52 – 65	6.4 – 2,400	2,000,000
Fluorine	4/223	52 – 3,100	6 – 130	1,800,000
Indeno(1,2,3-c,d)pyrene	92/223	26 – 140	1.34 – 810	560
Naphthalene	2/223	260 – 15,000	32 – 41	55,000
Phenanthrene	97/223	26 – 31	3.1 – 1,900	NE
Pyrene	79/223	26 – 290	3.35 – 1,460	1,500,000

Acronyms/Abbreviations:

IRP – Installation Restoration Program

NE – not established

PRG – preliminary remediation goal

5.3.1 AD-04, Air-Photo-Identified Possible Disposal Trench

AD-04 is located near the southern boundary of MCAF Tustin near Barranca Parkway and about 90 feet north of the eastern end of the Armed Services Reserve Center Garage, just outside of the Reserve Center fence. The AOC was identified as a possible disposal trench in an aerial photograph from 1965 (Jacobs Engineering 1992a). According to the Addendum to the revised PR/draft VSI Report, the location is covered by vegetation and there is no visible evidence of the trench (Jacobs Engineering 1992c).

Two rounds of soil sampling were conducted at AD-04 during the SV. A total of 26 soil samples were collected from 8 borings at depths of 1, 5, and 10 feet bgs. Groundwater was encountered at 7 to 10 feet bgs. The presence of groundwater at this depth suggested the possibility of release to groundwater. Therefore, two temporary wellpoints were installed during the second round of sampling. One wellpoint was installed upgradient of

Table 5-9
Summary of Confirmation Soil Sampling at IRP-9B – Subarea 3
 (units reported in micrograms per kilogram)

Analyte	Frequency of Detection	Detection Limits	Range of Detected Concentrations	1998 Residential PRG
Polynuclear Aromatic Hydrocarbons				
Acenaphthene	1/239	250 – 15,000	190	2,600,000
Acenaphthylene	10/239	500 – 30,000	64 – 110	NE
Anthracene	20/230	25 – 320	3.3 – 430	14,000,000
Benz(a)anthracene	80/240	25 – 1,500	1.5 – 510	560
Benzo(a)pyrene	99/240	29 – 310	2.3 – 880	56
Benzo(b)fluoranthene	115/240	50 – 620	2.3 – 2,600	560
Benzo(g,h,i)perylene	46/239	51 – 3,000	7.4 – 660	NE
Benzo(k)fluoranthene	67/240	25 – 1,500	1.4 – 530	56,000
Chrysene	113/240	25 – 1,500	1.6 – 670	6,100
Dibenz(a,h)anthracene	35/239	50 – 3,000	3.2 – 500	56
Fluoranthene	98/240	50 – 3,000	5.1 – 3,700	2,000,000
Fluorine	10/239	50 – 3,000	7.2 – 560	1,800,000
Indeno(1,2,3-c,d)pyrene	96/240	25 – 1,500	1.6 – 590	560
Naphthalene	1/239	250 – 15,000	730	55,000
Phenanthrene	113/240	25 – 1,500	3.2 – 6,000	NE
Pyrene	81/240	25 – 1,500	5.4 – 2,900	1,500,000

Acronyms/Abbreviations:

IRP – Installation Restoration Program

NE – not established

PRG – preliminary remediation goal

the AOC to monitor for COPCs in groundwater entering the AOC from fueling areas associated with Aircraft Parking Apron No. 2. The second wellpoint was installed downgradient of the AOC to monitor for COPCs in groundwater leaving the AOC.

Because no historical information was available on the nature of materials, if any, that may have been disposed at AD-04, all soil samples were analyzed on-site for VOCs and TRPH. Additionally, selected AD-04 samples were analyzed at an off-site laboratory for VOCs, PAHs, PCBs, and TAL metals plus molybdenum. For second-round sampling, all samples collected were submitted to the off-site laboratory for TAL metals plus molybdenum analysis. Tables 5-10 and 5-11 present sampling results for soil and groundwater, respectively. As Table 5-10 shows, analytes reported in soil included four metals above background, six VOCs, six PAH compounds, and Aroclor 1260. No organics were reported in groundwater. The leaching evaluation conducted as part of the RFA indicated that chloroform has the potential to affect groundwater at concentrations

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Table 5-10
COPCs and Range of Concentrations for Analytes Reported in Soil at AD-04

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	5/26	10	11.0 – 50.0	mg/kg	b
VOCs	0/26	6.0 – 25.0	ND	µg/kg	b
OFF-SITE LABORATORY RESULTS					
Analytes With Maximum Concentrations Above Background					
Beryllium ^c	26/26	5	0.52 – 1.2	mg/kg	1.1
Inorganic Analytes With Maximum Concentrations Above Background					
Aluminum ^c	26/26	200	21,000 – 38,900	mg/kg	36,300
Lead ^c	26/26	3 – 100	9 – 24.3	mg/kg	23.4
Vanadium ^c	26/26	50	54.7 – 87.9	mg/kg	80.6
Organic Analytes					
Volatile Organic Compounds					
Acetone ^c	3/14	11 – 14	5.5 – 42	µg/kg	b
Carbon disulfide ^{c,d}	1/14	5.7 – 7	1.8	µg/kg	b
Chloroform ^c	1/14	5.7 – 7	2.6	µg/kg	b
1,2-dichlorobenzene ^c	1/14	5.7 – 7	3.2	µg/kg	b
Methylene chloride ^{c,d}	8/14	5.7 – 6.7	1.5 – 2.3	µg/kg	b
Polynuclear Aromatic Hydrocarbons					
Benzo(a)pyrene ^c	1/14	2.6 – 26	17	µg/kg	b
Benzo(b)fluoranthene ^c	1/14	2.6 – 26	17	µg/kg	b
Benzo(k)fluoranthene ^c	1/14	2.6 – 26	9.1	µg/kg	b
Fluoranthene ^c	2/14	2.6 – 26	1.9 – 14	µg/kg	b
Phenanthrene ^c	2/14	2.6 – 26	0.58 – 4.1	µg/kg	b
Pyrene ^c	4/14	2.6 – 6.5	0.55 – 14	µg/kg	b
Polychlorinated Biphenyls					
Aroclor 1260 ^c	1/14	14 – 18	29	µg/kg	b
Tentatively Identified VOCs					
Acetonitrile ^c	1/14	NA	8	µg/kg	b
Inorganic Analytes With Maximum Concentrations Below Background					
Arsenic	26/26	10	5.7 – 10.5	mg/kg	17.5
Barium	26/26	200	160 – 242	mg/kg	305
Cadmium	3/26	0.87 – 1.4	0.61 – 1.2	mg/kg	1.8
Molybdenum	8/26	3.7 – 5.3	3.8 – 8.1	mg/kg	10

(table continues)

Table 5-10 (continued)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
Antimony	1/24	0.65 – 1.1	1.4	mg/kg	1.4
Cobalt	26/26	50	7.8 – 14.8	mg/kg	15.1
Copper	26/26	25	24.1 – 39.6	mg/kg	41.5
Chromium	26/26	10	22.8 – 38.9	mg/kg	39.2
Chromium (hexavalent)	1/4	0.024 – 0.039	0.029	mg/kg	0.16
Manganese	26/26	15	393 – 739	mg/kg	1,100
Nickel	26/26	40	15.4 – 27	mg/kg	27.8
Selenium	24/26	1 – 1.1	1.1 – 3.5	mg/kg	3.7
Zinc	26/26	20	83 – 141	mg/kg	141

Notes:

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b Background not calculated for organic compounds
- ^c COPC used to calculate risk
- ^d low concentrations of methylene chloride and carbon disulfide are frequently the result of laboratory contamination; however, as a conservative measure, these analytes are included in the list of COPCs for this area of concern

Acronyms/Abbreviations:

- COPC – chemical of potential concern
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- NA – not applicable
- ND – not detected
- TRPH – total recoverable petroleum hydrocarbons
- VOC – volatile organic compound

exceeding the tap water PRG. Groundwater was recommended for evaluation in the RI because of the carcinogenic risks resulting from the presence of chromium in groundwater (1.3×10^{-4}) as well as noncarcinogenic risks resulting from the presence of molybdenum. The RI geochemical evaluation indicated that metals in groundwater are within the naturally occurring range, and the leaching evaluation indicated that the 30-year average concentrations of chloroform leaching from soil to groundwater will be below the tap water PRG.

5.3.2 AS-06, Air-Photo-Identified Possible Temporary Storage Unit

AS-06 is located north of Moffett Drive in the east-central portion of MCAF Tustin. The AOC was identified in a 1953 aerial photograph and was visible in other aerial photographs up to January 1975 (Jacobs Engineering 1992a). AS-06 was a possible hazardous material storage unit at an isolated, undeveloped area at the north end of Kilpatrick Road. The unit measured approximately 60 feet by 80 feet. According to the

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Table 5-11
COPCs and Range of Concentrations for Analytes Reported in Groundwater at AD-04^a
 (units reported in micrograms per liter)

Analyte	Frequency of Detection	Detection Limits	CONCENTRATION		Background Levels
			CAD4WP001 (Downgradient)	CAD4WP002 (Upgradient)	
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
VOCs	0/7	3.0 – 25.0	ND	ND	
OFF-SITE LABORATORY RESULTS					
Inorganic Analytes with Maximum Concentrations Above Background					
Aluminum ^b	2/2	200	280	1,050	415
Chromium ^b	1/2	3	ND	30.9	11
Molybdenum ^b	2/2	200	28.9	374	BDL
Organic Analytes with Maximum Concentrations					
None					
Inorganic Analytes with Maximum Concentrations Below Background					
Arsenic	1/2	3	ND	7.8	8
Barium	1/2	16	ND	23.5	122
Cobalt	1/2	4	ND	8.3	26
Copper	2/2	25	4.6	7.5	21
Iron	2/2	100	376	1,180	3,850
Manganese	2/2	15	1,280	2,210	2,630
Nickel	2/2	40	19.4	19.1	38
Selenium	1/2	3	ND	3.5	326
Thallium	2/2	10	5.6	4.0	7
Zinc	2/2	20	32.6	14	88

Notes:

- ^a off-site laboratory results
^b COPC used to calculate risk

Acronyms/Abbreviations:

- BDL – below detection limits
 COPC – chemical of potential concern
 ND – not detected
 VOC – volatile organic compound

Addendum to the revised PR/draft VSI Report (Jacobs Engineering 1992c), the property is currently used for agriculture. During the SV, a concrete building foundation was discovered and delineated through a geophysical survey.

One round of soil sampling was performed at AS-06 in October and November 1995. A randomly located boring was drilled within each of the four quarters of the area of investigation, and samples were collected from 2.5, 5, and 10 feet bgs, except where groundwater was encountered at less than 10 feet bgs. Groundwater was encountered in three of the four borings at 8 to 10 feet bgs. Because no information was available on the nature of materials, if any, that were stored at AS-06, soil samples were analyzed on-site for VOCs and TRPH and off-site for VOCs, PAH compounds, PCBs, and TAL metals plus molybdenum (Table 5-12). Formal groundwater sampling was not conducted at AS-06. The on-site laboratory did not report VOCs or TRPH above the detection limit in soil or groundwater. The off-site laboratory reported two VOCs (chloroform and methylene chloride) and one PAH (phenanthrene) at concentrations much lower than the PRGs for these compounds. Silver was the only inorganic analyte reported above background. The leaching evaluation conducted as part of the RFA indicated that chloroform has the potential to affect groundwater at concentrations exceeding the tap water PRG. Therefore, groundwater was recommended for evaluation in the RI. The RI leaching evaluation indicated that the 30-year average concentration of chloroform leaching from soil to groundwater will be below the tap water PRG.

5.3.3 AS-08, Air-Photo-Identified Storage Area

AS-08 is located in the central portion of MCAF Tustin east of the main helicopter landing apron. The AOC was identified in an aerial photograph from 1976 and was visible in subsequent photographs taken before 1988 (Jacobs Engineering 1992a). AS-08 was an open storage area, approximately 100 feet by 120 feet, between what is now Dunn Street and Summit Street. The area contained 55-gallon drums that may have held hazardous materials or hazardous wastes. The open storage area was located 130 feet south of the southeastern end of Hangar No. 2. This area is currently covered with grass, and there is no surface expression of the former storage area (Jacobs Engineering 1992c). However, a concrete pad is located at the northern limit of the AOC at the southern edge of Dunn Street.

Two rounds of soil sampling were performed at AS-08 during the SV. During the first round, soil samples were collected at 1, 5, and 10 feet bgs at three boring locations. During the second round, samples were collected at 2, 5, and 10 feet bgs at four additional soil boring locations.

Because no information was available on the nature of materials, if any, stored at AS-08, soil samples were analyzed on-site for VOCs and TRPH and off-site for VOCs, PAH compounds, PCBs, and TAL metals plus molybdenum. Table 5-13 shows the results of soil sampling. Analytes reported at AS-08 included low concentrations of 18 VOCs, 2 PAHs, and 5 metals above background. These chemicals were evaluated by a screening

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Table 5-12
COPCs and Range of Concentrations for Analytes Reported in Soil at AS-06^a

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^b
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	0/11	10	ND	mg/kg	^b
VOCs	0/16	6.0 – 25.0	ND	µg/kg	^b
OFF-SITE LABORATORY RESULTS					
Analytes With Maximum Concentrations Above Background					
None					
Inorganic Analytes With Maximum Concentrations Above Background					
Silver ^c	1/2	0.76	0.81	mg/kg	BDL
Organic Analytes					
Volatile Organic Compounds					
Chloroform ^c	1/1	6.4	1.4	µg/kg	^d
Methylene chloride ^{c,e}	1/1	6.4	1.4	µg/kg	^d
Polynuclear Aromatic Hydrocarbons					
Phenanthrene ^c	1/1	2.8	3.1	µg/kg	^d
Inorganic Analytes With Maximum Concentrations Below Background					
Arsenic	2/2	10	9.2 – 9.9	mg/kg	17.5
Barium	2/2	200	178 – 179	mg/kg	305
Chromium	2/2	10	25.1 – 28.1	mg/kg	39.2
Lead	2/2	3 – 100	10.5 – 16.2	mg/kg	23.4
Aluminum	2/2	200	23,600 – 26,000	mg/kg	36,300
Beryllium	2/2	5	0.65 – 0.7	mg/kg	1.1
Cobalt	2/2	50	8.3 – 10.2	mg/kg	15.1
Copper	2/2	25	28.9 – 33.1	mg/kg	41.5
Manganese	2/2	15	337 – 492	mg/kg	1,100
Nickel	2/2	40	17.2 – 26.6	mg/kg	27.8
Selenium	2/2	5	1.2 – 1.9	mg/kg	3.7
Thallium	1/2	0.76	1.1	mg/kg	1.6
Vanadium	2/2	50	62.1 – 66.7	mg/kg	80.6
Zinc	2/2	20	98.6 – 117	mg/kg	141

Notes:

- ^a off-site laboratory results
- ^b background levels = calculated 99th percentile concentration (BNI 1997b)
- ^c COPC used to calculate risk
- ^d background not calculated for organic compounds

(table continues)

Table 5-12 (continued)

- ^e low concentrations of methylene chloride are frequently the result of laboratory contamination; however, as a conservative measure, these analytes are included in the list of COPCs for this area of concern

Acronyms/Abbreviations:

BDL – below detection limit
COPC – chemical of potential concern
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
ND – not detected
TRPH – total recoverable petroleum hydrocarbons
VOC – volatile organic compound

risk assessment based on residential and industrial exposure to soil COPCs. Carcinogenic and noncarcinogenic risks caused by COPCs in soil (although above background concentrations) were estimated to be 2.7×10^{-7} and 1.0, respectively. Carcinogenic risks less than 1×10^{-6} and noncarcinogenic risks less than or equal to 1 are considered allowable by U.S. EPA. Therefore, no action was recommended for this site. The AS-08 risk assessment is discussed further in Section 7.4.3. The leaching evaluation conducted as part of the RFA indicated that chloromethane, tetrachloroethene (PCE), and 1,1,2,2-tetrachloroethane had the potential to affect groundwater at concentrations exceeding the tap water PRG. Therefore, groundwater was recommended for evaluation in the RI. The RI leaching evaluation indicated that the 30-year average concentrations of chloromethane, PCE, and 1,1,2,2-tetrachloroethane in soil leaching to groundwater will be below the tap water PRG.

Groundwater was not encountered in any of the borings, and groundwater sampling was not performed. Although groundwater was not investigated at AS-08, the AOC is located within a large VOC plume that originates at an OU-1 site, IRP-3. Therefore, groundwater at AS-08 is being addressed as part of the remedial action for OU-1.

5.3.4 AST-02, Air-Photo-Identified Possible Aboveground Storage Tank

AST-02 is located in the western corner of MCAF Tustin. The site was identified in an aerial photograph from 1946 that showed an object less than 30 feet long, which was identified as a possible fuel, petroleum, oils, and lubricants (POL)/chemical tank (Jacobs Engineering 1992a). In a subsequent aerial photograph from 1947, the possible tank was replaced by a dark circular pit identified as a possible burn pit. An object at this same location and a road leading from the AOC are visible in most of the aerial photographs taken before 26 July 1988, at which time the construction of Aircraft Parking Apron No. 4 was under way. The AOC is currently inaccessible to visual inspection, because it is covered by a concrete parking apron (Jacobs Engineering 1992c).

The parking apron, which acts as a barrier to drilling, made soil sampling at AST-02 impractical. Therefore, as an indirect assessment of possible contamination, sampling

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Table 5-13
COPCs and Range of Concentrations for Analytes Reported in Soil at AS-08

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	6/26	10	13 – 142	mg/kg	b
Trichloroethene	1/26	6	11	µg/kg	b
OFF-SITE LABORATORY RESULTS					
Analytes With Maximum Concentrations Above Background					
None					
Inorganic Analytes With Maximum Concentrations Above Background					
Cadmium ^c	5/22	0.95 – 1.3	0.98 – 2.0	mg/kg	1.8
Cobalt ^c	22/22	50	5.7 – 18.1	mg/kg	15.1
Manganese ^c	22/22	15	203 – 1,810	mg/kg	1,100
Molybdenum ^c	10/22	3.8 – 4.7	4.6 – 13	mg/kg	10
Thallium ^c	13/22	0.67 – 0.79	0.79 – 2.1	mg/kg	1.6
Organic Analytes With Maximum Concentrations					
Volatile Organic Compounds					
Acetone ^c	10/12	11 – 13	7.6 – 67	µg/kg	b
2-chloroethylvinyl ether ^c	1/12	23 – 26	1.6	µg/kg	b
Chloromethane ^c	1/12	5.7 – 6.5	1.4	µg/kg	b
1,1-dichloroethene ^c	1/12	5.7 – 6.5	1.5	µg/kg	b
1,2-dichlorobenzene ^c	2/12	5.7 – 6.5	1.4 – 1.5	µg/kg	b
1,3-dichlorobenzene ^c	1/12	5.7 – 6.5	1.4	µg/kg	b
1,4-dichlorobenzene ^c	2/12	5.7 – 6.5	1.4	µg/kg	b
2-hexanone ^c	3/12	12 – 13	1.6 – 6.5	µg/kg	b
Methylene chloride ^{c,d}	4/12	5.7 – 6.5	1.3 – 2.5	µg/kg	b
Methyl ethyl ketone ^{c,d}	3/12	12 – 13	2.1 – 7.3	µg/kg	b
4-methyl-2-pentanone ^c	2/12	11 – 13	3.5 – 4.7	µg/kg	b
1,1,2,2-tetrachloroethane ^c	2/12	5.7 – 6.5	1.4 – 1.5	µg/kg	b
Tetrachloroethene ^c	2/12	5.7 – 6.4	1.6 – 7	µg/kg	b
Toluene ^c	1/12	5.7 – 6.5	1.3	µg/kg	b
Trichloroethene ^c	4/12	5.7 – 6.3	1.5 – 11	µg/kg	b
Trichlorofluoromethane ^c	1/12	5.7 – 6.5	1.4	µg/kg	b
m,p-xylene ^c	4/12	5.8 – 6.5	1.4 – 2.9	µg/kg	b
o-xylene ^c	2/12	5.7 – 6.5	1.4 – 1.5	µg/kg	b

(table continues)

Table 5-13 (continued)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
Polynuclear Aromatic Hydrocarbons					
Phenanthrene ^c	2/14	2.6 – 26	1.5 – 3.1	µg/kg	^b
Pyrene ^c	1/14	2.6 – 26	0.64	µg/kg	^b
Tentatively Identified VOCs					
Unknown 1	1/12	NA	6	µg/kg	^b
Unknown 2	3/12	NA	10 – 100	µg/kg	^b
Unknown 3	1/12	NA	300	µg/kg	^b
Inorganic Analytes With Maximum Concentrations Below Background					
Arsenic	22/22	10 – 200	5.3 – 11.4	mg/kg	17.5
Barium	22/22	200	109 – 234	mg/kg	305
Chromium	22/22	10	20.3 – 34.4	mg/kg	39.2
Chromium (hexavalent)	2/2	0.23 – 0.26	0.044 – 0.084	mg/kg	0.16
Lead	22/22	3	7.5 – 21.1	mg/kg	23.4
Aluminum	22/22	200	18,700 – 31,900	mg/kg	36,300
Antimony	3/22	0.67 – 1	0.84 – 1.1	mg/kg	1.4
Beryllium	22/22	5	0.47 – 1.1	mg/kg	1.1
Copper	22/22	25	19.2 – 38.1	mg/kg	41.5
Nickel	22/22	40	12.4 – 27.8	mg/kg	27.8
Selenium	16/22	0.90 – 0.99	1.1 – 2.0	mg/kg	3.7
Vanadium	22/22	50	41.9 – 72.7	mg/kg	80.6
Zinc	22/22	20	59.9 – 108	mg/kg	141

Notes:

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds
- ^c COPC used to calculate risk
- ^d low concentrations of methyl ethyl ketone and methylene chloride are frequently the result of laboratory contamination; however, as a conservative measure, these analytes are included in the list of COPCs for this area of concern

Acronyms/Abbreviations:

- COPC – chemical of potential concern
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- NA – not applicable
- TRPH – total recoverable petroleum hydrocarbons
- VOC – volatile organic compound

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during the SV was limited to groundwater sampling at the downgradient margin of the parking apron. Sampling was conducted on two separate occasions (December 1995 and February 1996) using two temporary wellpoints installed approximately 100 feet apart. The wellpoints were located approximately 250 feet downgradient of the AOC. Groundwater samples were analyzed for VOCs, PAHs, PCBs, and TAL metals, plus molybdenum. Table 5-14 presents the results of groundwater sampling. No organic COPCs were detected, which suggests soil contamination from a possible tank or possible burn pit is not present. Five metals (aluminum, cadmium, chromium, molybdenum, and nickel) exceeded background concentrations. Groundwater was recommended for evaluation in the RI (geochemical evaluation) because the carcinogenic risks resulting from chromium were estimated to be 4.9×10^{-4} and the noncarcinogenic risks were estimated to be 1.3. The RI geochemical evaluation indicated that metals in groundwater are within the naturally occurring range.

5.3.5 AST-04, Air-Photo-Identified Storage Unit

AST-04 is located at the southern boundary of MCAF Tustin near Barranca Parkway. The AOC was identified in an aerial photograph from 1966 (Jacobs Engineering 1992a). A possible elevated horizontal tank, approximately 10 feet by 30 feet, was identified in an area under development that is now occupied by the Armed Services Reserve Center.

Two rounds of soil sampling and one round of groundwater sampling were conducted at AST-04 during the SV. During the first round of sampling, soil samples were collected at four boring locations at depths of 1 and 5 feet bgs. Because groundwater was encountered at 7 to 8 feet bgs, no soil samples were collected from borings at 10 feet bgs during the first round of sampling. However, groundwater (grab) samples were collected and subjected to on-site laboratory analysis for VOCs. During the second round of sampling, soil samples were collected at four locations at depths of 1, 5, and 10 feet bgs; groundwater was sampled twice using a temporary wellpoint located on the downgradient side of the AOC.

No historical information is available on the nature of materials, if any, that may have been stored or released at AST-04. However, because this AOC consists of a probable tank, anticipated COPCs were limited to components of fuels, POLs, lubricants, waste oils, and solvents. Therefore, soil samples were analyzed on-site for VOCs and TRPH and at an off-site laboratory for VOCs, PAH compounds, PCBs, and metals (arsenic, barium, cadmium, chromium, lead, and molybdenum). Second-round samples were submitted to an off-site laboratory for metals analysis. During the first round of sampling, groundwater was analyzed at an off-site laboratory for VOCs, PAHs, PCBs, and TAL metals plus molybdenum. During the second round, groundwater was analyzed on-site for VOCs.

Soil and groundwater results are shown in Tables 5-15 and 5-16, respectively. Eight VOCs and 12 PAHs were reported in the soil at AST-04. No organic COPCs were reported in groundwater. Three metals (cadmium, manganese, and molybdenum) were reported in groundwater at concentrations exceeding background. The leaching

Table 5-14
COPCs and Range of Concentrations for Analytes Reported in Groundwater at AST-02^a
 (units reported in micrograms per liter)

Analyte	Frequency of Detection	Detection Limit	CONCENTRATIONS			Background Levels ^b
			CAT2WP001		CAT2WP002	
			(Unfiltered)	(Filtered)	(Unfiltered)	
Analytes With Maximum Concentrations Above Background						
Aluminum ^c	4/4	27	73.9	ND	97.5 – 1,540	415
Cadmium ^c	2/4	4	ND	ND	5 – 9.8	3
Chromium ^c	4/4	10	4.5	6.8	7.1 – 88.6	11
Molybdenum ^c	2/4	17	27.9	ND	25	BDL
Nickel ^c	2/4	14	ND	50.3	55.8	38
Inorganic Analytes With Maximum Concentrations Below Background						
Arsenic	2/4	3	7.9	3.4	4.7	8
Barium	3/4	16	82.2	20.4	40.5 – 44.7	122
Antimony	1/4	2 – 3	ND	4.3	ND	6
Cobalt	3/4	4	ND	9.7	5.4 – 19.1	26
Copper	3/4	3	ND	7.2	3.8 – 18.2	21
Iron	3/4	5	142	ND	119 – 2,470	3,850
Manganese	4/4	15	50.8	153	30.4 – 41.7	2,630
Selenium	4/4	5	32.3	34.1	21.3 – 49	326
Thallium	2/4	3	ND	3.1	6.2	7
Vanadium	1/4	4	ND	ND	7.9	9
Zinc	3/4	3	16.9	ND	14.4 – 15.7	88

Notes:

- ^a off-site laboratory results
- ^b background levels = calculated 99th percentile concentration (BNI 1997b)
- ^c COPC used to calculate risk

Acronyms/Abbreviations:

- BDL – below detection limit
- COPC – chemical of potential concern
- ND – not detected

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Table 5-15
COPCs and Range of Concentrations for Analytes Reported in Soil at AST-04

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	2/22	10	11 – 13	mg/kg	b
VOCs	0/22	6.0 – 25.0	ND	µg/kg	b
OFF-SITE LABORATORY RESULTS					
Inorganic Analytes With Maximum Concentrations Above Background					
None					
Organic Analytes					
Volatile Organic Compounds					
Acetone ^c	3/11	11 – 13	52 – 100	µg/kg	b
Carbon disulfide ^{c,d}	2/11	5.3 – 6.3	1.3 – 2.5	µg/kg	b
Carbon tetrachloride ^c	1/11	5.3 – 6.3	1.7	µg/kg	b
Methylene chloride ^{c,d}	1/11	5.3 – 6.3	1.3	µg/kg	b
Methyl ethyl ketone ^c	1/11	11	20	µg/kg	b
Toluene ^c	4/11	5.5 – 6.3	1.2 – 1.6	µg/kg	b
m,p-xylene ^c	1/11	5.3 – 6.3	3.4	µg/kg	b
o-xylene ^c	1/11	5.3 – 6.3	1.5	µg/kg	b
Polynuclear Aromatic Hydrocarbons					
Acenaphthene ^c	3/11	2.4 – 11	4.8 – 33	µg/kg	b
Anthracene ^c	4/11	2.4 – 5.5	0.56 – 310	µg/kg	b
Benz(a)anthracene ^c	1/11	2.4 – 26	360	µg/kg	b
Benzo(a)pyrene ^c	4/11	2.4 – 5.5	4.3 – 130	µg/kg	b
Benzo(b)fluoranthene ^c	4/11	2.4 – 11	3.5 – 150	µg/kg	b
Benzo(k)fluoranthene ^c	4/11	2.4 – 5.5	2.1 – 79	µg/kg	b
Chrysene ^c	4/11	2.4 – 5.5	6.4 – 470	µg/kg	b
Fluoranthene ^c	4/11	2.4 – 11	5.4 – 1,500	µg/kg	b
Fluorene ^c	2/11	2.4 – 11	86 – 340	µg/kg	b
Naphthalene ^c	1/11	2.4 – 260	27	µg/kg	b
Phenanthrene ^c	4/11	2.4 – 5.5	0.85 – 1,400	µg/kg	b
Pyrene ^c	4/11	2.4 – 5.5	10 – 1,000	µg/kg	b
Inorganic Analytes With Maximum Concentrations Below Background					
Arsenic	22/22	10	2.4 – 11.4	mg/kg	17.5
Barium	22/22	200	32.6 – 214	mg/kg	305
Cadmium	11/22	0.22 – 1.2	0.25 – 1.8	mg/kg	1.8
Chromium	22/22	10	7.8 – 32.5	mg/kg	39.2

(table continues)

Table 5-15 (continued)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
Chromium (hexavalent)	1/2	0.038	0.066	mg/kg	0.16
Lead	22/22	3	2.6 – 12	mg/kg	23.4
Molybdenum	14/22	4 – 4.7	0.46 – 6.3	mg/kg	10

Notes:

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds
- ^c COPC used to calculate risk
- ^d low concentrations of carbon disulfide and methylene chloride are frequently the result of laboratory contamination; however, as a conservative measure, these analytes are included in the list of COPCs for this area of concern

Acronyms/Abbreviations:

- COPC – chemical of potential concern
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- ND – not detected
- TRPH – total recoverable petroleum hydrocarbons
- VOC – volatile organic compound

evaluation conducted as part of the RFA indicated that the concentrations of organic COPCs that could leach from soil to groundwater would be below the tap water PRGs. However, groundwater was recommended for further evaluation in the RI because the noncarcinogenic risk was estimated to be 7.9 due to the presence of metals in groundwater.

The RI used three types of analyses to evaluate the metals data for groundwater at AST-04 and elsewhere throughout the facility. These analyses were illustrated using geochemical association scatter plots, vertical distribution graphs, and aerial distribution maps. The conclusion of the geochemical evaluation was that cadmium, manganese, and molybdenum were detected within their natural distributions at MWA-04. Since the concentrations are naturally occurring, remediation of groundwater is not required. The evaluation of metals is discussed further in Section 5.6, Basewide Groundwater Study.

5.3.6 MDA-04, Miscellaneous Disposal Area

MDA-04 is located in the northern portion of MCAF Tustin between McCord Road and Severyns Road next to Calnan Street. The AOC is the area between Buildings 161, 262, and 263 and was identified as a general support equipment parking lot and maintenance area (MCAS Tustin 1996). The northwest side of Building 161 appears to have been an active oil disposal location. Throughout the 1970s and 1980s, fluids and oils were regularly spilled onto the ground.

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Table 5-16
COPCs and Range of Concentrations for Analytes Reported in Groundwater at AST-04^a
(units reported in micrograms per liter)

Analyte	Frequency of Detection	Detection Limit	CONCENTRATIONS	Background Levels ^b
			CAT4WP001	
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS				
VOCs	0/5	3.0 – 12.5	ND	b
OFF-SITE LABORATORY RESULTS				
Analytes With Maximum Concentrations Above Background				
Cadmium ^c	1/1	5	8.4	3
Molybdenum ^c	1/1	200	255	BDL
Manganese ^c	1/1	15	10,300	2,630
Inorganic Analytes With Maximum Concentrations Below Background				
Arsenic	1/1	10	8	8
Barium	1/1	200	18.8	122
Chromium	1/1	10	3.3	11
Aluminum	1/1	200	91.6	415
Cobalt	1/1	50	5.4	26
Iron	1/1	100	202	3,850
Nickel	1/1	40	4.6	38
Selenium	1/1	5	4.1	326
Thallium	1/1	10	6.1	7
Zinc	1/1	20	20.4	88

Notes:

- ^a off-site laboratory results
- ^b background levels = calculated 99th percentile concentration (BNI 1997b)
- ^c COPC used to calculate risk

Acronyms/Abbreviations:

- BDL – below detection limit
- COPC – chemical of potential concern
- ND – not detected
- VOC – volatile organic compound

A single round of soil and groundwater sampling was conducted at MDA-04 during the SV. Samples were taken from four borings judgmentally located around the margins of buildings. A fifth boring was included to accommodate sampling at a transformer pad. Samples were collected at depths of 1, 5, and 10 feet bgs in all borings.

MDA-04 is located crossgradient to a TCE plume in groundwater at DSS-01 and upgradient from a plume at MMS-05/ST-67. Therefore, two temporary wellpoints were installed and sampled at the AOC: one was installed near a boring location within stained ground at Building 161; the other was located on the downgradient side of the AOC. The wellpoints were screened in the first WBZ. Analytes detected in groundwater included three VOCs and one metal (molybdenum) above background. Although the VOCs were reported at low concentrations, groundwater at MDA-04 is being addressed as part of the OU-1 remedial action because the site is adjacent to a large VOC plume that originates at OU-1 Site IRP-13S.

MDA-04 contains stained areas that may represent releases of waste oils, lubricants, combustion products, and solvents. Components of petroleum products, lubricants, waste oils, and solvents were the expected COPCs. Therefore, all soil samples for each of the five borings were analyzed on-site for VOCs and TRPH and at an off-site laboratory for VOCs, PAH compounds, PCBs, and metals (arsenic, barium, cadmium, chromium, lead, and molybdenum). Groundwater was analyzed for VOCs and metals. Results of soil and groundwater sampling are shown in Tables 5-17 and 5-18, respectively.

VOCs and TRPH were reported in soil samples analyzed by the on-site laboratory. Six VOCs, nine PAHs, and one PCB were also reported in soil samples analyzed by the off-site laboratory. One metal (arsenic) was reported above background. The leaching evaluation conducted as part of the RFA indicated that organic COPCs will leach from soil to groundwater at concentrations below the tap water PRG. However, groundwater was recommended for evaluation in the RI because the carcinogenic risk exceeded a 1×10^{-6} (geochemical evaluation and an evaluation of future impact). The RI geochemical evaluation indicated that metals in groundwater were within the naturally occurring range. The RI evaluated the maximum reported concentration of 1,2-dichloroethane and concluded that it would have negligible future impact. The RI recommended no further action for groundwater.

5.3.7 MDA-07, Miscellaneous Disposal Area

MDA-07 is in the northern portion of MCAF Tustin on Moffett Road, off the northeastern corner of Hangar No. 1 (Building No. 28). The area was reportedly used beginning in 1955 as a blimp and automobile wash area (MCAS Tustin 1996). Historical aerial photographs indicate that Copeland Street has been moved, and the area where runoff and stagnant wastes seeped into the ground is now covered by asphalt.

A single round of soil sampling was conducted at MDA-07 in September 1996. Because of the large size of the area of investigation, the routine sampling strategy was modified

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Table 5-17
COPCs and Range of Concentrations for Analytes Reported in Soil at MDA-04

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	10/16	10	10 – 615	mg/kg	^b
VOCs	2/16	6.0 – 25.0	Trace	µg/kg	^b
OFF-SITE LABORATORY RESULTS					
Analytes With Maximum Concentrations Above Background					
Arsenic ^c	16/16	10	2.6 – 21.4	mg/kg	17.5
Organic Analytes					
Volatile Organic Compounds					
Acetone ^c	5/6	39	6.8 – 1,000	µg/kg	^b
Carbon disulfide ^{c,d}	2/6	6.3 – 6.4	3.5 – 10	µg/kg	^b
2-hexanone ^c	3/6	13	7.1 – 50	µg/kg	^b
Methyl ethyl ketone ^c	3/6	13 – 16	8.7 – 480	µg/kg	^b
4-methyl-2-pentanone ^c	2/6	13	20 – 63	µg/kg	^b
Toluene ^c	1/6	6.3 – 6.4	2.8	µg/kg	^b
Polynuclear Aromatic Hydrocarbons					
Acenaphthene ^c	1/16	11 – 13	1.1	µg/kg	^b
Anthracene ^c	5/16	5.8 – 6.4	0.54 – 2.1	µg/kg	^b
Benzo(a)pyrene ^c	5/16	5.8 – 6.4	1.4 – 15	µg/kg	^b
Benzo(b)fluoranthene ^c	4/16	12 – 13	1.2 – 8.2	µg/kg	^b
Benzo(k)fluoranthene ^c	4/16	5.8 – 6.4	0.67 – 3.9	µg/kg	^b
Chrysene ^c	4/16	5.8 – 6.4	1.5 – 12	µg/kg	^b
Fluoranthene ^c	5/16	12 – 13	1.1 – 13	µg/kg	^b
Phenanthrene ^c	7/16	5.8 – 6.4	0.53 – 15	µg/kg	^b
Pyrene ^c	8/16	5.8 – 6.4	0.4 – 15	µg/kg	^b
Polychlorinated Biphenyls					
Aroclor 1254 ^c	1/16	18 – 34	21	µg/kg	^b
Tentatively Identified VOCs					
Unknown hydrocarbons	15/6	NA	5 – 200	µg/kg	^b
Unknowns	14/6	10	6 – 100	µg/kg	^b
Inorganic Analytes With Maximum Concentrations Below Background					
Barium	16/16	200	64.3 – 257	mg/kg	305
Cadmium	14/16	0.24 – 0.25	0.25 – 0.48	mg/kg	1.8
Chromium	16/16	10	8.5 – 36.5	mg/kg	39.2
Lead	16/16	3	4.9 – 16.5	mg/kg	23.4
Molybdenum	15/16	0.57	1.5 – 8	mg/kg	10

(table continues)

Table 5-17 (continued)**Notes:**

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds
- ^c COPC used to calculate risk
- ^d low concentrations of carbon disulfide are frequently the result of laboratory contamination; however, as a conservative measure, this analyte is included in the list of COPCs for this area of concern

Acronyms/Abbreviations:

- COPC – chemical of potential concern
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- NA – not applicable
- TRPH – total recoverable petroleum hydrocarbons
- VOC – volatile organic compound

to collect samples from eight borings. Two randomly located borings were drilled within each of the four quarters of the area of investigation. In each of the borings, samples were collected at depths of 1, 5, and 10 feet bgs. No groundwater was encountered, and no wellpoints were planned or installed for groundwater sampling at the AOC.

Because MDA-07 was a possible blimp and automobile wash area, the materials released were expected to include solvents, POLs, waste oils, and grease. Therefore, soil samples were analyzed on-site for VOCs and TRPH and at an off-site laboratory for VOCs, PAH compounds, PCBs, and metals (arsenic, barium, cadmium, chromium, lead, and molybdenum). Results for soil are shown in Table 5-19.

TCE was reported in 5 of the 25 soil samples analyzed by the on-site laboratory. TCE and four additional VOCs, acetone, Freon 113, methyl ethyl ketone (MEK), and toluene were also reported in soil samples analyzed by the off-site laboratory. One metal (arsenic) was reported above background. The concentration of arsenic also exceeded PRGs. The leaching evaluation conducted as part of the RFA indicated that TCE has the potential to affect groundwater at concentrations exceeding the tap water PRG. Therefore, groundwater was recommended for further leaching evaluation in the RI. The RI leaching evaluation indicated that the 30-year average concentration of TCE leaching from soil to groundwater will be below the tap water PRG.

Groundwater at MDA-07 was recommended for no further action because the RI leaching evaluation showed that site-specific releases from soil to groundwater will not result in excessive concentrations of COPCs in groundwater. However, MDA-07 is located above a groundwater plume associated with IRP-12, an OU-1 site. Therefore, groundwater at MDA-07 is being addressed as part of the remedial action for OU-1.

5.3.8 MMS-01, Major Spill Area

MMS-01 is located in the central portion of MCAF Tustin east of the main helicopter landing apron. The AOC comprises two noncontiguous areas resulting from a spill of approximately 3,000 gallons of JP-5 in December 1989 (Jacobs Engineering 1992b). The

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Table 5-18
COPCs and Range of Concentrations for Analytes Reported in Groundwater at MDA-04^a
 (units reported in micrograms per liter)

Analyte	Frequency of Detection	Detection Limit	CONCENTRATION		Background Levels ^b
			CMD4WP001	CMD4WP002	
Organic Analytes					
1,2-dichloroethane ^c	1/2	5	1.1	ND	^d
Molybdenum ^c	2/3	8	8	14.6	BDL
Freon 113 ^c	1/2	10	1.7	ND	^d
Methyl ethyl ketone ^{c,e}	2/2	10	4.4	2.5	^d
Tentatively Identified VOCs					
Unknown phthalate	1/2	NA	ND	6	^d
Unknown (1)	1/2	NA	ND	20	^d
Inorganic Analytes With Maximum Concentrations Below Background					
Arsenic	1/3	20	ND – 45.2 ^f	6	8.3
Barium	2/3	200	28.1 – 32	21	122

Notes:

- ^a off-site laboratory results
- ^b background levels = calculated 99th percentile concentration (BNI 1997b)
- ^c COPC used to calculate risk
- ^d background not calculated for organic compounds
- ^e low concentrations of methyl ethyl ketone are frequently the result of laboratory contamination; however, as a conservative measure, this analyte is included in the list of COPCs for this area of concern
- ^f initial result suspect; upon resampling, result of ND

Acronyms/Abbreviations:

- BDL – below detection limit
- COPC – chemical of potential concern
- NA – not applicable
- ND – not detected
- VOC – volatile organic compound

Table 5-19
COPCs and Range of Concentrations for Analytes Reported in Soil at MDA-07

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	0/25	10	ND	mg/kg	^b
Trichloroethene	5/25	6.0 – 25.0	3 – 10.5	µg/kg	^b
OFF-SITE LABORATORY RESULTS					
Analytes					
Arsenic ^c	7/7	10	5.6 – 17.7	mg/kg	17.5
Organic Analytes					
Acetone ^c	1/7	12 – 13	64	µg/kg	^b
Methyl ethyl ketone ^{c,d}	2/7	12 – 13	2.8 – 11	µg/kg	^b
Toluene ^c	1/7	5.9 – 6.4	4.5	µg/kg	^b
Trichloroethene ^c	6/7	6.3	4.2 – 32	µg/kg	^b
Freon 113 ^c	3/7	12 – 13	3.7 – 7.7	µg/kg	^b
Inorganic Analytes With Maximum Concentrations Below Background					
Barium	7/7	200	134 – 193	mg/kg	305
Cadmium	3/7	0.24 – 0.26	0.27 – 0.56	mg/kg	1.8
Chromium	7/7	10	19.1 – 30.5	mg/kg	39.2
Lead	7/7	3	7.6 – 12.8	mg/kg	23.4
Molybdenum	5/7	0.73 – 0.89	1.4 – 3.6	mg/kg	10

Notes:

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds
- ^c COPC used to calculate risk
- ^d low concentrations of methyl ethyl ketone are frequently the result of laboratory contamination; however, as a conservative measure, this analyte is included in the list of COPCs for this area of concern

Acronyms/Abbreviations:

- COPC – chemical of potential concern
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- ND – not detected
- TRPH – total recoverable petroleum hydrocarbons

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fuel was released from a refueling truck at a location east of Building 562 and reportedly flowed across the asphalt parking lot in two directions: northward to an unpaved dirt area (MMS-01a) and southward into a storm drain (MMS-01b) (ASI 1990). Much of the fuel was removed, and the contaminated soil was reportedly excavated and disposed off-site. There is no surface expression of the spill, but sampling was conducted as part of the SV to confirm that no COPCs are present in soil in the unpaved dirt area or in the subsurface soil around the storm drain (Jacobs Engineering 1992b).

One round of soil sampling was performed during the SV. Soil borings were randomly located within each of four quarters of the two areas of investigation (eight borings). In each boring, soil samples were collected at 1, 5, and 10 feet bgs, except where groundwater was encountered at less than 10 feet bgs. In MMS-01A, sampling was conducted through the asphalt-paved area as well as in the unpaved area. In MMS-01B, sampling was limited to the portions of the sampling grid outside of the concrete-bermed drain itself. Groundwater was encountered in three of the four borings at MMS-01A and in all four borings at MMS-01B; from each of these borings, a groundwater sample was collected and submitted to an on-site laboratory for analysis. No formal groundwater samples were collected.

Soil and groundwater samples were analyzed on-site for VOCs and TRPH. Selected soil samples were analyzed off-site for VOCs and PAH compounds. Table 5-20 shows the results of soil sampling at MMS-01. Organic COPCs reported in the soil as revealed by off-site laboratory analysis included six PAH compounds and four VOCs. On-site laboratory analysis indicated TRPH in the soil and groundwater, but no VOCs in either medium. The RFA concluded that TRPH, PAH compounds, and VOCs at MMS-01 are sporadically distributed at very low concentrations (i.e., TRPH at 62 mg/kg or less, PAH compounds at 16 µg/kg or less, and VOCs at 26 µg/kg or less). The leaching evaluation conducted as part of the RFA indicated that methylene chloride has the potential to affect groundwater at concentrations exceeding the tap water PRG. Therefore, groundwater was recommended for further leaching evaluation in the RI. The RI leaching evaluation indicated that the 30-year average concentration of methylene chloride leaching from soil to groundwater will be below the tap water PRG. VOCs reported in groundwater samples at MMS-01 are below the MCLs.

5.3.9 MWA-03, Former Wash Pad

MWA-03 is located at the western boundary of MCAF Tustin, off Bumblebee Road. The AOC is a former wash pad at the Fuels Branch, operated by Marine Wing Support Squadron (MWSS)-374 for fueling equipment maintenance and inventory (Jacobs Engineering 1992b; SCS 1979). The former wash area consisted of a 40- by 16-foot concrete pad sloped to drains discharging to an oil/water (O/W) separator (TOW-04). The integrity of the concrete pad was poor and cracks were present (Jacobs Engineering 1992b). The unit was decommissioned in 1993, the O/W separator wash was removed, and the former location of the O/W separator was paved over with asphalt (Jacobs

Table 5-20
COPCs and Range of Concentrations for Analytes Reported in Soil at MMS-01

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	2/20	10	22.0 – 62.0	mg/kg	b
VOCs	0/20	6.0 – 25.0	ND	µg/kg	b
OFF-SITE LABORATORY RESULTS					
Organic Analytes					
Volatile Organic Compounds					
Acetone ^c	9/12	11 – 13	9.4 – 26	µg/kg	b
Methylene chloride ^c	9/12	5.5 – 6.1	2.7 – 13	µg/kg	b
Toluene ^c	1/3	6.5 – 6.7	1.8	µg/kg	b
Polynuclear Aromatic Hydrocarbons					
Benzo(b)fluoranthene ^c	1/13	2.4 – 2.8	4.4	µg/kg	b
Benzo(g,h,i)perylene ^c	1/13	2.4 – 2.8	16	µg/kg	b
Dibenz(a,h)anthracene ^c	1/13	2.4 – 2.8	6.8	µg/kg	b
Indeno(1,2,3-c,d)pyrene ^c	1/13	2.4 – 2.8	11	µg/kg	b
Phenanthrene ^c	6/13	2.4 – 2.8	2.5 – 6	µg/kg	b
Pyrene ^c	2/13	2.4 – 2.8	3.4 – 4.4	µg/kg	b
Tentatively Identified VOCs					
Dimethyldisulfide ^c	1/13	NA	7	µg/kg	b
Unknown (2)	1/13	NA	10 – 20	µg/kg	b

Notes:

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds
- ^c COPC used to calculate risk

Acronyms/Abbreviations:

COPC – chemical of potential concern
 µg/kg – micrograms per kilogram
 mg/kg – milligrams per kilogram
 NA – not applicable
 ND – not detected
 TRPH – total recoverable petroleum hydrocarbons
 VOC – volatile organic compound

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Engineering 1992b). However, the area beneath the wash pad was not included in the closure activities for TOW-04.

Two rounds of soil and groundwater sampling were conducted at MWA-03 during the SV. For first-round soil sampling, four borings were judgmentally located where releases could have occurred (e.g., cracks in the pad). Samples were collected at 1, 5, and 10 feet bgs. For second-round sampling, selected boring locations were designed to delimit the extent of the release and included two locations on the downgradient side of the pad, one location upgradient from the pad and one on the eastern margin of the pad. As part of second-round sampling, one temporary wellpoint was installed on the downgradient side of the AOC to monitor for COPCs in groundwater migrating off-site.

MWA-03 is a former vehicle wash pad, and the expected COPCs were limited to components of fuels, lubricants, waste oils, and solvents. Soil samples were submitted for on-site screening analysis of VOCs and TRPH and to an off-site laboratory for analysis of VOCs, PAH compounds, PCBs, and metals (arsenic, barium, cadmium, chromium, lead, and molybdenum). Groundwater was analyzed on-site for VOCs and off-site for VOCs, PAH compounds, PCBs, and TAL metals plus molybdenum. Tables 5-21 and 5-22 present the results for soil and groundwater, respectively.

COPCs reported in the soil at MWA-03 included VOCs, PAHs, one PCB, and metals above background. In addition, TRPH was reported in 8 of 26 soil samples analyzed by the on-site laboratory. Metals were the only COPCs identified in groundwater above background. The leaching evaluation conducted as part of the RFA indicated that VOCs would leach to groundwater at concentrations below the tap water PRG and that metals (arsenic) would leach at concentrations below background. However, groundwater was recommended for evaluation in the RI (geochemical evaluation) because the screening risk assessment indicated a carcinogenic risk greater than 1×10^{-6} and potential adverse systemic effects. The RI geochemical evaluation indicated that metals in groundwater are within the naturally occurring range. No VOCs were reported in groundwater.

Subsequent to the RI, a RCRA action was conducted to remediate soil at MWA-03 (OHM 1998b). During excavation, 285 tons of TRPH- and PAH-contaminated soil were removed, transported, and treated using an on-site thermal desorption unit. Confirmation soil samples were collected from the sidewalls and floor of the excavation for analysis of TPH as diesel and gasoline, PAHs, and VOCs (Table 5-23). Analytical results for the confirmation soil samples verified that all cleanup goals (i.e., PRGs) were met. A screening risk assessment was performed following soil removal using confirmation results and soil boring results outside the excavation area (OHM 2000b). The results of the screening risk assessment for soil indicate a calculated net cancer risk of 0. The hazard index was less than one. The risk assessment for MWA-03 is discussed further in Section 7.

Table 5-21
COPCs and Range of Concentrations for Analytes Reported in Soil at MWA-03
(prior to removal action)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	8/26	10	21 – 9,750	mg/kg	b
VOCs	0/26	6.0 – 25.0	ND	µg/kg	b
OFF-SITE LABORATORY RESULTS					
Analytes With Maximum Concentrations Above Background					
Arsenic ^c	23/23	10	4.5 – 80.7	mg/kg	17.5
Organic Analytes With Maximum Concentrations					
Acetone ^c	5/10	12 – 13	14 – 330	µg/kg	b
Benzene ^c	1/10	5.8 – 6.6	2.1	µg/kg	b
Carbon disulfide ^{c,d}	4/10	5.8 – 6.3	1.4 – 7.5	µg/kg	b
Ethylbenzene ^c	5/10	5.8 – 6.4	1.2 – 17	µg/kg	b
2-hexanone ^c	3/10	12 – 13	2.1 – 33	µg/kg	b
Methylene chloride ^{c,d}	1/10	5.8 – 6.6	1.6 – 3.3	µg/kg	b
Methyl ethyl ketone ^c	9/10	12	2.8 – 58	µg/kg	b
Tetrachloroethene ^c	5/10	5.8 – 6.3	1.5 – 5.8	µg/kg	b
Toluene ^c	6/10	5.8 – 6.3	1.8 – 4.1	µg/kg	b
Trichloroethene ^c	3/10	5.8 – 6.3	1.3 – 2.7	µg/kg	b
m,p-xylene ^c	6/10	5.8 – 6.3	2.7 – 75	µg/kg	b
o-xylene ^c	6/10	5.8 – 6.3	1.4 – 13	µg/kg	b
Polynuclear Aromatic Hydrocarbons					
Chrysene ^c	1/10	2.6 – 2,700	1,900	µg/kg	b
Fluoranthene ^c	1/10	2.6 – 3,000	1,300	µg/kg	b
Naphthalene ^c	7/10	2.6 – 56	27 – 20,000	µg/kg	b
Phenanthrene ^c	8/10	2.6 – 56	3.7 – 8,400	µg/kg	b
Polychlorinated Biphenyls					
Aroclor 1260 ^c	1/10	14 – 17	27	µg/kg	b
Tentatively Identified VOCs					
Acetonitrile ^c	1/10	NA	22	µg/kg	b
n-butylbenzene ^c	1/10	NA	150	µg/kg	b
n-isopropyltoluene ^c	1/10	NA	25	µg/kg	b
p-isopropyltoluene ^c	3/10	NA	84 – 210	µg/kg	b
sec-butylbenzene ^c	1/10	NA	52	µg/kg	b

(table continues)

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Table 5-21 (continued)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
Substituted benzene 1	1/10	NA	7 – 86	µg/kg	^b
Substituted benzene 2	1/10	NA	6 – 64	µg/kg	^b
Substituted naphthalene 1	4/10	NA	27 – 53	µg/kg	^b
Substituted naphthalene 2	1/10	NA	25	µg/kg	^b
Substituted naphthalene 3	2/10	NA	27 – 28	µg/kg	^b
1,2,4-trimethylbenzene ^c	3/10	NA	87 – 320	µg/kg	^b
1,3,5-trimethylbenzene ^c	2/10	NA	76 – 77	µg/kg	^b
Unknown	1/10	NA	55	µg/kg	^b
Unknown hydrocarbon	34/34	NA	9 – 330	µg/kg	^b
Inorganic Analytes With Maximum Concentrations Below Background					
Barium	23/23	200	74 – 182	mg/kg	305
Cadmium	15/23	1.2 – 1.3	0.28 – 1.6	mg/kg	1.8
Chromium	23/23	10	12.7 – 26.6	mg/kg	39.2
Lead	23/23	3	5.3 – 13.5	mg/kg	23.4
Molybdenum	14/23	4.4 – 5.1	1.1 – 5.3	mg/kg	10

Notes:

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds and essential inorganic analytes
- ^c COPC used to calculate risk
- ^d low concentrations of carbon disulfide and methylene chloride are frequently the result of laboratory contamination; however, as a conservative measure, these analytes are included in the list of COPCs for this area of concern

Acronyms/Abbreviations:

- COPC – chemical of potential concern
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- NA – not applicable
- ND – not detected
- TRPH – total recoverable petroleum hydrocarbons
- VOC – volatile organic compound

Table 5-22
COPCs and Range of Concentrations for Analytes Reported in Groundwater at MWA-03^a
(units reported in micrograms per liter)

Analyte	Frequency of Detection	Detection Limits	CONCENTRATIONS		Background Levels ^b
			CMW3WP001 (Unfiltered)	CMW3WP001 (Filtered)	
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
VOCs	0/1	3 – 12.5	ND	ND	^b
Analytes With Maximum Concentrations Above Background					
Aluminum ^c	1/2	27	1,040	ND	415
Arsenic ^c	2/2	10	3.1	26.8	8.3
Cadmium ^c	1/2	4	ND	4.8	2.5
Chromium ^c	2/2	10	33.3	3.2	10.6
Molybdenum ^c	1/2	17	ND	24.7	BDL
Thallium ^c	1/2	3	ND	32.7	7.3
Inorganic Analytes With Maximum Concentrations Below Background					
Barium	1/2	16	21.6	ND	122
Antimony	1/2	3	ND	6.1	6.4
Cobalt	1/2	4	7.7	ND	25.6
Copper	1/2	3	4.9	ND	20.6
Iron	2/2	100	1,260	26.3	3,850
Manganese	2/2	15	801	768	2,630
Nickel	1/2	14	24.3	ND	37.5
Selenium	2/2	5	161	199	326
Vanadium	1/2	4	5.1	ND	9.3
Zinc	2/2	20	14.8	31.4	88.2

Notes:

- ^a off-site laboratory results
- ^b background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds and common ions
- ^c COPC used to calculate risk

Acronyms/Abbreviations:

- BDL – below detection limits
- COPC – chemical of potential concern
- ND – not detected
- VOC – volatile organic compound

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Table 5-23
Summary of Analytical Results for Confirmation Soil Sampling at MWA-03

Analyte	Frequency of Detection	Detection Limits	Range of Concentrations	Units	1995/1996 Residential PRGs
Total Recoverable Petroleum Hydrocarbons					
TPH as diesel	2/11	11 – 12	100 – 130	mg/kg	NE
Metals					
Arsenic	11/11		1.5 – 8.3		17.5

Source:
OHM 1998b

Acronyms/Abbreviations:
mg/kg – milligrams per kilogram
NE – not established
PRG – preliminary remediation goal
TPH – total recoverable hydrocarbons

5.4 RI SITE IRP-13E, DRUM STORAGE AREA NO. 3

IRP-13E is located in the northwestern portion of MCAF Tustin between Buildings 41 and 66. The site includes a large stained area (approximately 140 feet by 45 feet) where drums of chemicals were stored. Materials formerly stored in the area include hydraulic fluid, diesel fuel, leaded gasoline, oil, paint stripper, battery acids, and solvents. The area is now paved and was used for parking until the base closed.

IRP-13E was investigated during the SI in 1991 and 1992 (Jacobs Engineering 1993a). The SI conducted at IRP-13E consisted of a soil gas survey, five shallow soil (1 foot bgs) samples, and four groundwater samples collected by HydroPunch.

The RI augmented the SI by collecting additional soil and groundwater samples. Fifty borings were drilled. The on-site laboratory analyzed 4 duplicates and 67 regular soil samples for VOCs and TRPH. Thirty-eight samples were collected from 2 feet bgs, 11 samples from 7 feet bgs, 11 samples from 12 feet bgs, 3 samples from 21 feet bgs, and 3 samples from 24 feet bgs. Fifty-one samples were sent to an off-site laboratory for confirmation and additional analysis (metals, PAH compounds, VOCs, and PCBs). Three boreholes were advanced to the first WBZ to allow a HydroPunch sample to be collected. Table 5-24 shows soil sampling results. (Subsequent to the RI, IRP-13E was redefined to exclude MDA-06 and MDA-10. Data collected in these areas are not included in Table 5-24.)

Seven groundwater samples were collected during the RI by micropurging temporary wellpoints installed in deeper soil borings. The on-site laboratory screened these samples for VOCs. Because VOCs were not detected, the samples were not sent to the off-site laboratory for analysis.

Petroleum contamination was detected in soil at depths ranging to 2 feet bgs. PCBs, pesticides, PAH compounds, and lead were found in shallow soil. Groundwater collected during the SI contained one SVOC and three metals above SI-defined screening values. The leaching evaluation conducted as part of the basewide groundwater study in the OU-1/OU-2 RI indicated that all soil COPCs would leach to groundwater at concentrations below the tap water PRG.

5.5 ROUTES OF EXPOSURE

Exposure pathways for the OU-2 IRP sites and AOCs include ingestion, inhalation, and dermal contact with COPCs in soil. (Section 7 summarizes risks due to these routes of exposure). There is currently no exposure pathway for contaminated groundwater at any of the sites, because the water in the first WBZ is not being used. However, groundwater represents a potential route of exposure should water in the first WBZ be used for irrigation or domestic purposes in the future.

Exposure to COPCs can also occur if contaminants in the soil leach to groundwater that is used for irrigation or domestic purposes. The potential for leaching was assessed in the

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Table 5-24
COPCs and Range of Concentrations for Analytes Reported in Soil at IRP-13E

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
ON-SITE LABORATORY INDICATOR PARAMETER RESULTS					
TRPH	19/88	10 – 52	14.4 – 3,500	mg/kg	b
VOCs	0/61	6 – 25	ND	µg/kg	b
OFF-SITE LABORATORY RESULTS					
Inorganic Analytes With Maximum Concentrations Above Background					
Antimony ^c	1/22	0.61 – 13.4	0.78 – 2.3	mg/kg	1.4
Barium ^c	1/22	89.5	29.5 – 311	mg/kg	305
Copper ^c	1/26	21.4	9.2 – 48.3	mg/kg	41.5
Lead ^c	5/27	9.3 – 10.1	4.5 – 52.3	mg/kg	23.4
Mercury ^c	1/23	0.10 – 0.24	0.20	mg/kg	BDL
Nickel ^c	1/26	14.9 – 23.5	5.7 – 29.1	mg/kg	27.8
Zinc ^c	3/26	3 – 4	23.8 – 521	mg/kg	141
Organic Analytes With Maximum Concentrations					
Polynuclear Aromatic Hydrocarbons					
Anthracene ^c	3/32	2.6 – 2,400	0.93 – 120	µg/kg	b
Benzo(b)fluoranthene ^c	4/32	2.6 – 2,400	390 – 430	µg/kg	b
bis(2-ethylhexyl) phthalate ^c	2/4	396 – 429	440 – 580	µg/kg	b
Naphthalene	1/33	2.6 – 6,500	24	µg/kg	b
Phenanthrene ^c	11/34	2.6 – 2,400	0.72 – 76	µg/kg	b
Volatile Organic Compounds					
Acetone	3/23	10 – 46	3 – 11	µg/kg	b
Methyl ethyl ketone	1/23	10 – 13	9	µg/kg	b
Unknown (TIC)	1	NA	6	µg/kg	b
Pesticides and Polychlorinated Biphenyls					
Aroclor 1260 ^c	6/37	13 – 208	48 – 340	µg/kg	b
alpha-chlordane ^c	3/23	2 – 104	1.0 – 1.3	µg/kg	b
gamma-chlordane ^c	4/22	1.8 – 104	0.74 – 2.1	µg/kg	b
4,4'-DDD ^c	4/22	3.4 – 20.8	1.3 – 60	µg/kg	b
4,4'-DDE ^c	5/23	3.5 – 20.8	1.7 – 80	µg/kg	b
4,4'-DDT ^c	4/19	3.5 – 20.8	17 – 240	µg/kg	b

(table continues)

Table 5-24 (continued)

Analyte	Frequency of Detection	Detection Limit	Range of Concentrations	Units	Background Levels ^a
Inorganic Analytes With Maximum Concentrations Below Background					
Aluminum	22/22	16 – 36	6,010 – 24,400	mg/kg	36,300
Arsenic	27/27	2 – 3	2.6 – 16	mg/kg	17.5
Beryllium	22/26	0.24 – 0.48	0.21 – 0.96	mg/kg	1.1
Cadmium	1/26	0.9 – 2.4	1.3	mg/kg	1.8
Chromium (total)	26/26	3 – 6	5.8 – 33.6	mg/kg	39.2
Cobalt	19/22	5.0 – 5.5	2.0 – 14.3	mg/kg	15.1
Iron	22/22	6 – 12	13,000 – 42,300	mg/kg	44,900
Magnesium	22/22	47 – 66	3,220 – 13,400	mg/kg	19,800
Manganese	22/22	1.0 – 2.0	102 – 650	mg/kg	1,100
Molybdenum	6/22	2.6 – 4.4	3.8 – 6.8	mg/kg	10
Potassium	22/22	600 – 1,220	1,020 – 4,980	mg/kg	6,910
Selenium	6/26	0.61 – 7.7	0.81 – 2.9	mg/kg	3.7
Sodium	22/22	32 – 70	319 – 1,070	mg/kg	6,320
Thallium	1/26	0.26 – 1.4	1.0	mg/kg	1.6
Vanadium	22/22	3 – 7	22.3 – 66.6	mg/kg	80.6

Notes:

- ^a background levels = calculated 99th percentile concentration (BNI 1997b)
- ^b background not calculated for organic compounds
- ^c COPC used to calculate risk

Acronyms/Abbreviations:

- BDL – below detection limit
- COPC – chemical of potential concern
- DDD – dichlorodiphenyldichloroethane
- DDE – dichlorodiphenyldichloroethene
- DDT – dichlorodiphenyltrichloroethane
- IRP – Installation Restoration Program
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram
- NA – not applicable
- ND – not detected
- TIC – tentatively identified compound
- TRPH – total recoverable petroleum hydrocarbons
- VOC – volatile organic compound

Section 5 Site Characteristics

RFA, ESI, and RI using a leaching evaluation. Net infiltration rates were estimated on the basis of anticipated surface cover indicated in the proposed land-use plan and assumed surface-water application rates. The first step in the leaching evaluation was a conservative screening calculation based on direct and instantaneous partitioning (immediate adsorption and dissolution) into groundwater of maximum soil concentrations. If this conservative screening calculation indicated a potential for groundwater concentrations to exceed regulatory standards (e.g., PRGs, MCLs), then a second step was carried out, using the VLEACH computer model. The VLEACH model estimated adsorption, dissolution, and volatilization in the vadose zone and provided migration rates to groundwater over time. If the VLEACH model indicated an effect on groundwater over regulatory standards, then the site or AOC received further evaluation via a basewide groundwater study in the RI. RFA, ESI, and RI sites were also evaluated further in the RI if: 1) groundwater COPCs were present at concentrations that pose an excess cancer risk greater than 10^{-5} (ESI) or 10^{-6} (RFA); 2) COPCs leaching from soil to groundwater posed an excess cancer risk greater than 10^{-5} (ESI) or 10^{-6} (RFA); or 3) COPCs present in or potentially leached to groundwater posed a noncancer risk greater than 1.

5.6 BASEWIDE GROUNDWATER STUDY

The OU-1/OU-2 RI basewide groundwater study provided additional information used to confirm the disposition of the no action sites and AOCs. The portions of the study that impacted the disposition of the no action sites included:

- a geochemical evaluation of metals in groundwater and
- a vadose zone fate and transport (leaching) analysis.

The purpose of the geochemical evaluation was to determine the basewide distribution of chemicals naturally occurring in groundwater and surface water. Once this distribution had been established, it was possible to determine whether COPCs at a particular site or AOC were present as a result of site-specific activity or were the result of natural variations present at the installation.

The three types of illustrations used to evaluate the metals data for groundwater are described below.

Geochemical association scatter plots. Scatter plots of selected metals versus nitrate, iron, aluminum, and sulfate TDS were generated to help determine whether elevated concentrations of metals that were observed at MCAF Tustin were naturally occurring or due to site-specific activities. For example, at MCAF Tustin, the elevated concentrations of both manganese and molybdenum did not associate with any known contaminant sources, but both closely reflected the distribution of TDS at the facility. Therefore, the geochemical evaluation concluded that the observed distribution of manganese and molybdenum was not caused by contaminant releases but indicated association of a metal with high salt content. Similarly, chromium has an apparent association with iron, with higher iron concentrations corresponding to higher chromium concentrations. The RI

noted that this may result from the presence of soils in which chromite (FeCr_2O_4) minerals are concentrated and concluded on this basis that the observed chromium distribution in groundwater is naturally occurring.

Vertical distribution graphs. Graphs showing concentration versus depth were prepared for the metals that exceeded background in at least one sample. A uniform vertical distribution of metals indicates a naturally occurring element distribution rather than one that resulted from a surface or near-surface release. The vertical distribution graphs indicated that arsenic at IRP-1 appeared to be the result of a site-specific release because several samples with elevated concentrations of arsenic were concentrated within the first WBZ. IRP-1 is being addressed in a separate ROD. The vertical distribution graphs did not identify site-specific releases at any of the sites and AOCs addressed in this ROD.

Aerial distribution maps. Concentration distribution maps were developed for selected chemicals to examine their distribution patterns. A random distribution indicates a naturally occurring distribution, while a zoned distribution may indicate an anthropogenic impact if the distribution is related spatially to a contaminant source or sources.

Metals in groundwater at AD-04, AST-02, AST-04, IRP-2, MDA-04, and MWA-03 were evaluated by these means and found to be within natural distributions of metals at MCAF Tustin. As a result, it was concluded that remediation of metals in groundwater was not necessary at these sites and AOCs.

The vadose zone fate and transport (leaching) analysis was performed to determine the maximum and 30-year average concentration (in groundwater) of COPCs that could potentially leach from soil to groundwater. The maximum and 30-year average concentrations were then compared to tap water PRGs to evaluate whether remedial action is necessary to prevent leaching of contaminants in soil to groundwater.

Leaching evaluations were performed during the RI at AD-04, AS-06, AS-08, MDA-07, MMS-01, and IRP-13E. On the basis of a comparison of the maximum and 30-year average concentrations with the PRGs, it was determined that no remedial action was required for soil at these sites and AOCs.

The OU-1/OU-2 RI details the application of the basewide groundwater study to the no action IRP sites and AOCs. Section 7 summarizes the results.

Section 6**CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES**

This section discusses the current and reasonably anticipated future land uses, and current and potential groundwater and surface water uses. The site and resource uses determine realistic exposure scenarios in the baseline risk assessment.

6.1 LAND USES

On 02 July 1999, MCAF Tustin was closed, and the Marine Corps' mission at the facility was incorporated into the MCAS Miramar operations in San Diego, California. Access to the base is currently controlled by security services. Utility systems and services are maintained as necessary to provide support for caretaker, lessee, and environmental cleanup operations. The majority of the buildings are unoccupied.

In compliance with the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, an MCAS Tustin SP/RP was developed and approved by the Local Redevelopment Agency (LRA) on 31 October 1996 and updated in September 1998 (The Planning Center 1998). The MCAS Tustin SP/RP comprises a variety of land uses, including residential, commercial, and recreational. Figure 6-1 shows the reuse planned for each portion of the base; Table 6-1 also describes site-specific land reuses.

On 20 September 1997, the Department of Housing and Urban Development (HUD) conditionally approved the Reuse Plan as submitted. In addition to HUD concurrence, Secretary of the Navy approval of the document is needed. This requires prior completion of an environmental document designed to evaluate the environmental impacts associated with the closure and reuse of MCAF Tustin. On 31 December 1997, the DON noticed in the Federal Register formal determination of surplus for the disposal and reuse of MCAF Tustin. The LRA and the United States Marine Corps (USMC) finalized a joint Environmental Impact Statement/Environmental Impact Report in December 1999 (USMC 1999).

6.2 GROUNDWATER USES

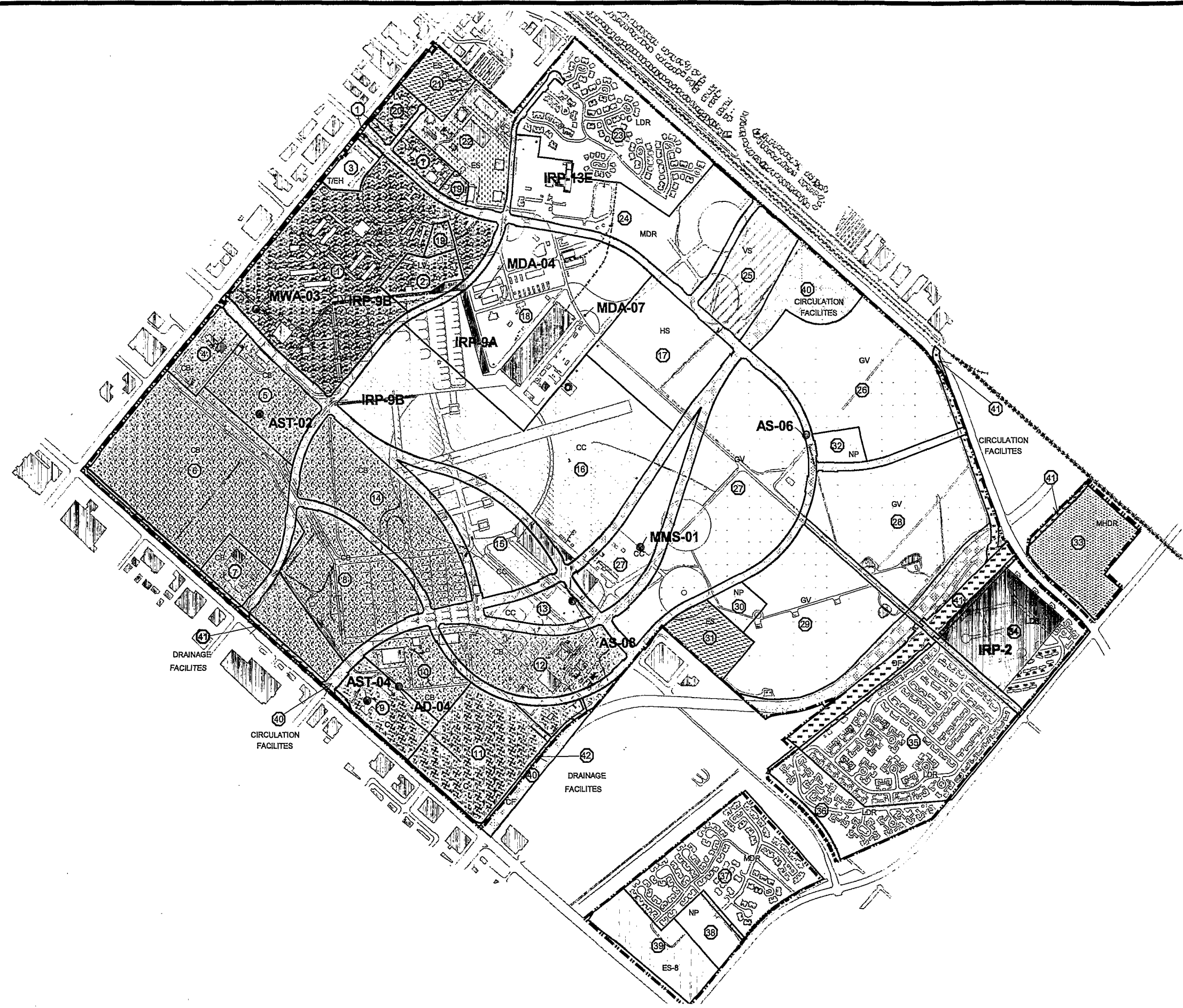
MCAF Tustin is located within the Irvine groundwater subbasin, which has been designated by the California RWQCB Santa Ana Region as a public water supply source (RWQCB 1995). The regional aquifer beneath the base is currently a source of municipal drinking water. At present, shallower zones are not used for drinking water because of their generally low yield and poor quality (the shallow groundwater is saline or brackish.) As mentioned in Section 5, the highest concentrations of salt and TDS occur in the first WBZ. The highest TDS concentration reported in groundwater from the first WBZ was 23,000 milligrams per liter. Groundwater containing TDS concentrations of this magnitude is not generally used for public drinking water (RWQCB 1995).

6.3 SURFACE-WATER USES

Several man-made surface-water channels on MCAF Tustin contain water year-round. The channels discharge to San Diego Creek, which ultimately directs surface runoff downstream to Newport Bay.

Several sections of the on-site drainage ditches and portions of Peters Canyon Channel and Santa Ana-Santa Fe Channel were designated as potential wetland by the U.S. Fish and Wildlife Service (USDA 1992). The USACOE designated two drainage areas as jurisdictional wetlands (Durham 1996) (refer to Figure 5-3). In 1999, a wetlands determination was completed to verify the extent and quality of wetland habitat and to provide sufficiently detailed and accurate jurisdictional delineations to support permitting and mitigation planning. As a result of this determination, eight areas were identified to be jurisdictional waters of the United States. Within those jurisdictional waters, a smaller area was determined to be vegetated wetlands/seasonal wetlands (BNI 2000).

No sensitive habitats have been identified at MCAF Tustin. However, the upper Newport Bay Ecological Reserve, approximately 5 miles southwest of the installation, into which Peters Canyon Channel flows, was established in 1975 to preserve and enhance this saltwater marsh ecosystem. Eight species classified by California as either rare or endangered are dependent on the upper Newport Bay. A series of marshy wildlife refuges (approximately 300 acres at UCI) are located approximately 5 miles south of the installation.



LEGEND

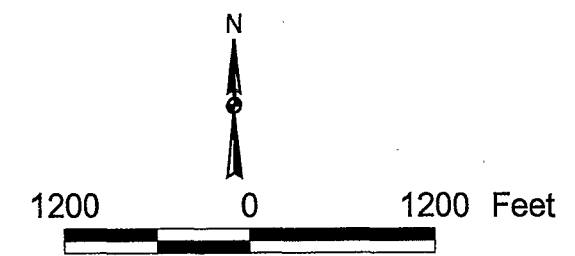
- GOVERNMENT PROPERTY LINE
- MCAF TUSTIN REUSE PARCELS
- BUILDING OR STRUCTURE
- EXISTING ROAD OR PAVED AREA
- PARKING
- RAILROAD
- OPERABLE UNIT 2

SYMBOL	LAND USE
①	PARCEL NUMBER
④⑩	CIRCULATION FACILITIES
④①	DRAINAGE FACILITIES
C	COMMERCIAL
CB	COMMERCIAL BUSINESS
CC	COMMUNITY CORE
CP	COMMUNITY PARK
—	EASEMENTS/ROADS
ES	ELEMENTARY SCHOOL (K-6)
ES-8	ELEMENTARY SCHOOL (K-8)
GV	GOLF VILLAGE
HS	HIGH SCHOOL
LDR	LOW DENSITY RESIDENTIAL
LV	LEARNING VILLAGE
MDR	MEDIUM DENSITY RESIDENTIAL
MHDR	MEDIUM HIGH DENSITY RESIDENTIAL
NP	NEIGHBORHOOD PARK
RP	URBAN REGIONAL PARK
T/EH	TRANSITIONAL/EMERGENCY HOUSING
VS	VILLAGE SERVICES

SOURCES:

PARCEL DESIGNATION AND FUTURE LAND REUSE ARE BASED ON MCAS TUSTIN SPECIFIC PLAN/REUSE PLAN, ERRATA, HNTB, SEPTEMBER 1998.

BASE MAP BASED ON AERIAL SURVEY CONDUCTED BY AIRBORNE SYSTEMS, INC. ON OCTOBER 21, 1990. REVISED BY BECHTEL IN NOVEMBER 1997 TO UPDATE BASE MAP.



Record of Decision / Remedial Action Plan

Figure 6-1

Proposed Reuse of On-Base Property

Marine Corps Air Facility Tustin, California

Bechtel National, Inc.
CLEAN II Program

Date: 1/3/00
File No.: 141L4928
Job No.: 22214-141
Rev No.: A

Table 6-1
Current and Proposed Land Uses

Site/ AOC No.	Current Land Use or Land Use Prior to Closure	Proposed Future Land Use	Reuse Parcel No.
IRP-2	Prior to closure, IRP-2 was located in an area that housed military personnel and their families.	The proposed land use for the area containing IRP-2 is "low-density residential."	34
IRP-9	IRP-9 is currently a grass-covered area adjacent to Aircraft Hangar No. 1. IRP-9A was used by helicopter maintenance crews. IRP-9B received drainage from Apron 1.	IRP-9 is located in an area designated for reuse as an urban regional park, training facility, "commercial business," and a "community core."	1, 2, 4, 5, 8, 12, 13, 14, 15, 16, 18, 24
IRP-13E	IRP-13E is currently an open paved lot. Prior to closure, the lot was used for storage of discarded equipment such as chopped-up barbed wire, old splintered pontoons, and other debris.	The future land use at IRP-13E is planned as "medium-density residential."	24
AD-04	AD-04 is an open grassy area adjacent to a dirt road leading past the garage.	AD-04 is located in an area designated for reuse as "commercial business."	9
AS-06	AS-06 is currently being used for agricultural purposes, and crops are planted over the site.	AS-06 is located in an area designated for reuse as "golf village."	9
AS-08	AS-08 is currently an unused open grassy area.	AS-08 is located in an area designated for reuse as "community core."	13
AST-02	AST-02 is currently covered with an 8-inch-thick concrete pad. Prior to closure, this area was used as a parking apron for helicopters.	AST-02 is located in an area designated for reuse as "commercial business."	5
AST-04	AST-04 is an open grassy area between the road leading to the Armed Services Reserve Center and the center itself. The parcel containing this site has been transferred to the U.S. Department of the Army.	AST-04 is located in an area designated for reuse as "federal property, military."	9
MDA-04	Prior to closure, MDA-04 was used as a general support equipment parking lot and maintenance area.	MDA-04 is in an area designated for reuse as an "urban regional park."	18
MDA-07	Prior to closure, MDA-07 was used as an open (self) physical education recreational area.	MDA-07 is in an area designated for reuse as an "urban regional park."	18
MMS-01	The area containing MMS-01 is currently fenced. Prior to closure, this area served as the main motor pool for MCAF Tustin.	MMS-01 is in an area designated for reuse as "community core."	27
MWA-03	MWA-03 (wash pad) has been remediated, and the area is currently inactive.	MWA-03 is in an area designated for reuse as a "learning village."	1

Acronyms/Abbreviations:

AOC – area of concern

IRP – Installation Restoration Program

MCAF – Marine Corps Air Facility

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Section 7

SUMMARY OF SITE RISKS

Human-health risk assessments (HHRAs) were conducted for the no action sites and AOCs using data collected during the ESI, RFA, and RI. The objective of these risk assessments was to determine the likelihood that exposure to chemicals found in soil and/or groundwater poses a threat to human health if no action is taken. The type of risk assessment performed varied depending on the program. Risk evaluations performed under the RFA were based on a screening risk assessment. Risk assessments performed as part of the ESI and RI were conducted under the premise of a baseline risk assessment.

A baseline risk assessment was conducted for IRP-2 and IRP-9A during the ESI. The ESI also included a baseline risk assessment for IRP-2 and IRP-9A under the assumption that localized soil hot spots were removed. A screening risk assessment was conducted for IRP-9B during the PAH apron study (BNI 1998). A screening risk assessment for AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03 was conducted during the RFA. A baseline risk assessment was conducted for IRP-13E during the RI. Risks were recalculated at IRP-9 and MWA-03 following soil removal actions at these sites. Results of the IRP-9A risk assessment are contained in a letter report (OHM 2000a); results of the IRP-9B risk assessment are contained in the Closure Report for this site (OHM 2000a). Results of the MWA-03 screening risk assessment are contained in a memorandum titled "Screening Risk Assessment for Site MWA-03 at MCAF, Tustin, CA" (OHM 2000b).

In addition to the assessment conducted for the COPCs identified in soil and groundwater, screening risk assessments were also performed at several sites to evaluate risks associated with potential future groundwater contamination due to the possible vertical migration of COPCs in soil. The evaluation was based on a site-specific fate and transport (leaching) evaluation. Risks were estimated for the COPCs identified with a potential to impact groundwater quality at concentrations exceeding the tap water U.S. EPA PRGs. The HHRA methodology is provided in Section 6 of the ESI Report (BNI 1996a), Section 5 of the RFA Report (BNI 1997b), and Section 7 of the RI Report for OU-1 and OU-2 (BNI 1997a). Corresponding fate and transport analyses are also presented in each of these reports.

Habitat surveys were performed for the OU-2 IRP sites/AOCs in October and November 1994 and February 1995, and it was concluded that there are no suitable wildlife habitats present (BNI 1996i,j). Therefore, no ecological risk assessments were performed for these sites/AOCs.

7.1 BASELINE RISK ASSESSMENT APPROACH

The baseline risk assessment approach and the results are discussed below.

7.1.1 Contaminant Identification

The procedures used to identify the COPCs to be evaluated in the risk assessment are consistent with the U.S. EPA's Risk Assessment Guidance for Superfund (RAGS) (U.S. EPA 1989) and Interim Final Guidance for Data Usability in Risk Assessment (U.S. EPA 1990). The COPCs used were contaminants identified in the upper 2 feet of soil, the upper 10 feet of soil, and in groundwater from HydroPunch borings, monitoring

wells, and wellpoints located within the sites and AOCs. All risk assessments used validated off-site laboratory data.

7.1.2 Exposure Scenarios

An exposure assessment identifies the populations at potential risk and the mechanisms by which members of those populations could be exposed to the COPCs in each medium. It is also a process by which the chemical concentrations at the point of exposure and the chemical doses are calculated.

Because MCAF Tustin is a closed facility, the exposure assessment focused on people who might be exposed while living, working, or playing directly on each IRP site or AOC in the future. Exposure of people who live, work, or play in communities surrounding MCAF Tustin is possible through movement of chemical vapors and contaminated dust from the facility to off-facility areas. However, even if no mitigating action is taken, those people, being farther from the sites, will receive less exposure than those who will eventually be spending much of the day on-site.

The HHRA for all OU-2 IRP sites included risk calculated using a residential scenario. This is considered to be the most conservative because of the duration of exposure and number of exposure pathways. Additional exposure scenarios were assumed for most sites depending on proposed future land use (Table 7-1). The HHRA for IRP-2 was performed during the ESI using a residential scenario. The HHRA for IRP-9 was performed during the ESI using residential and recreational scenarios (Table 7-1). The HHRA for IRP-13E was performed during the RI using a residential scenario, an industrial scenario, a recreational scenario, and a construction scenario (Table 7-1).

The exposure assumptions for each of these scenarios are summarized below.

7.1.2.1 RESIDENTIAL SCENARIO

Under the residential scenario, the resident is assumed to be a person who lives in a house on-site from birth to age 30. (Thirty years is the 90th percentile of time that people in the United States live at one address [U.S. EPA 1989].) It is further assumed that the person never leaves the property except when on vacation, which occurs once a year for 2 weeks, and that beginning at age 7 years, the person spends 2 days a week outdoors and thus handles soil. The concentration of airborne contaminants is assumed to be equal indoors and outdoors. COPCs in soil to 10 feet bgs (or samples taken at depths up to 12 feet bgs if samples were not collected at 10 feet bgs) are treated as being available to the resident, because soil would be excavated to 10 feet for basement and swimming pool construction, and some of the soil from the subsurface may be left on the surface. Water used in the home is assumed to come from a private well that draws water from the shallow aquifer beneath the site. It is unlikely that anyone would install a private well to obtain water for home use (due to the high TDS content, the low yield in the first WBZ, and the availability of municipal drinking water); however, the potential risk presented by the COPCs in groundwater was estimated using exposure conditions associated with residential use of the groundwater as tap water.

Section 7 Summary of Site Risks

Table 7-1
Exposure Scenarios for the Human-Health Risk Assessment

Site/AOC ID*	EXPOSURE SETTING			Construction Worker	Proposed Future Land Use
	Residential	Industrial	Recreational		
ESI Sites					
IRP-2	X				Low-density residential
IRP-9	X		X		Urban regional park, training facility, commercial business, community core
RFA AOCs					
AD-04	X	X			Commercial business
AS-06	X	X			Golf village
AS-08	X	X			Community core
AST-02	X	X			Commercial recreation
AST-04	X	X			Armed services reserve/ commercial business, military
MDA-04	X	X			Urban regional park
MDA-07	X	X			Urban regional park
MMS-01	X	X			Agriculture land/golf village
MWA-03	X	X			Learning village
RI Site					
IRP-13E	X	X	X	X	Medium density residential

Note:

- * in general, a baseline risk assessment was conducted for the ESI and RI sites and a screening risk assessment was conducted for the RFA AOCs

Acronyms/Abbreviations:

- AOC – area of concern
 ESI – expanded site inspection
 ID – identifier
 IRP – Installation Restoration Program
 RFA – Resource Conservation and Recovery Act (RCRA) facility assessment
 RI – remedial investigation

Possible exposure pathways examined for the chemicals in near-surface and shallow soil at the no action IRP sites and AOCs were ingestion of soil, inhalation of vapors and dust, and direct contact with the skin. Possible exposure pathways examined for chemicals in groundwater were ingestion of groundwater, inhalation of vapors, and direct contact with the skin. As mentioned previously, the risk assessments for all no action IRP sites and AOCs included risk calculated using a residential scenario, which is considered to be the most conservative.

7.1.2.2 OFFICE WORKER

If a site is redeveloped for commercial business, the individuals most likely to be exposed would be owners and employees of the businesses. An office worker was chosen to represent business owners and employees. The office worker is a person who works in a commercial building on-site for a period of 25 years, which is an exposure duration recommended for workers in U.S. EPA's RAGS. The person has normal working hours and time off. The concentration of airborne contaminants is assumed to be equal indoors and outdoors. Only COPCs in the upper 2 feet of soil are considered to be available to the office worker. Possible exposure pathways evaluated for COPCs in surface soil at the IRP sites were ingestion of soil, inhalation of vapors and dust, and direct contact with the skin. For the office worker, the groundwater pathway is assumed to be incomplete (i.e., the office worker will not be exposed to groundwater).

7.1.2.3 RECREATIONAL SCENARIO

Some of the IRP sites are proposed for reuse as urban regional parks. In the recreational setting, the receptor was assumed to be a child taken by an adult to a park to play for 1 hour a day from the age of 2 through 6 years. Two to 6 years old is the upper part of the age range in which soil ingestion is higher than at any other age for people engaged in low to moderately dusty activities. COPCs in the upper 2 feet of soil are considered to be available under a recreational setting. Possible exposure pathways evaluated for COPCs in surface soil at the IRP sites were ingestion of soil, inhalation of vapors and dust, and direct contact with the skin. For the recreational setting, the groundwater pathway is not considered to be complete.

7.1.2.4 CONSTRUCTION WORKER

The construction worker is defined an individual engaged in the construction of homes or other buildings that are part of the city of Tustin's redevelopment plans. Hence, the assessment of the construction worker scenario was conducted only for those sites identified with such redevelopment plans. Exposure time and frequency are the same as for the office worker, but exposure duration is assumed to be 1 year. COPCs in the upper 10 feet of soil are considered to be available to the construction worker. Possible exposure pathways evaluated were ingestion of soil, inhalation of vapors and dust, and direct contact with the skin. For the construction worker, the groundwater pathway is assumed to be complete (i.e., the construction worker may be exposed to groundwater).

Section 7 Summary of Site Risks

7.1.3 Exposure-Point Concentrations and Dose Estimation

The exposure-point concentration (EPC) is the chemical concentration on which dose was based; it is the concentration of a chemical in the contaminated medium (e.g., soil, groundwater) at the point of contact with a receptor (e.g., resident). Exposure conditions used in the estimation of risk were chosen to represent what is known as "reasonable maximum exposure." Use of these exposure conditions tends to overestimate risk. This effort to overestimate risk is deliberate; it provides risk managers a margin of safety when making cleanup decisions. The combination of the intake variables, expressing the exposure conditions for each receptor at each site, results in a chronic daily dose. The dose is an estimate of exposure for each pathway.

Risks were calculated by integrating the chronic daily dose with toxicity factors. Toxicity factors are numbers developed by U.S. EPA for each COPC that indicate the toxicity of the chemicals. The toxicity factor for carcinogenic effects is called a cancer slope factor (CSF); the toxicity factor for noncarcinogenic effects is called a reference dose (RfD). Chemicals that show a potential for both carcinogenic and noncarcinogenic health effects are assigned both slope factors and reference doses.

In addition to the U.S. EPA-derived CSFs, Cal-EPA has developed CSFs for a group of carcinogens (Cal-EPA 1994). Following DON policy, both U.S. EPA and Cal-EPA slope factors were used in the estimation of the risk from those chemicals when present. CSFs and RfDs are derived from the results of human epidemiological studies or chronic animal bioassays to which animal-to-human extrapolation have been applied.

For the baseline HHRA performed in the RI, the nominal EPC of the COPCs in the soil at the sites was the 95 percent upper confidence level (UCL) of the mean reported concentrations when the statistical distribution of the concentrations was normal or lognormal. Otherwise, when a statistically valid 95 percent UCL could not be calculated, the highest measured concentration was used as the EPC and treated as an upper bound mean. For groundwater, exposure conditions were based on the maximum concentrations of COPCs in groundwater. Maximum concentrations were used because the groundwater data are limited. Similarly, maximum soil concentrations used to estimate potential groundwater concentrations were based on a fate and transport (leaching) evaluation.

7.1.4 Risk Characterization

Excess lifetime cancer risks are determined in the baseline risk assessment by multiplying the intake level and the CSF. Excess lifetime cancer risks are probabilities generally expressed in scientific notation (e.g., 1×10^{-6} or 1E-6). An excess lifetime cancer risk of 1×10^{-6} indicates that, as a plausible upper bound, an individual has a one in a million chance of developing cancer as a result of site-related exposure to a carcinogen over a 70-year lifetime under the specific exposure conditions at a site. Guidelines for managing cancer risks are promulgated in the NCP (40 *Code of Federal Regulations* 300.430[e][2][i][A][2]). According to these regulations, an excess cancer risk of 10^{-6} is allowable, and excess cancer risks ranging from 10^{-6} to 10^{-4} are considered generally

allowable. Cancer risks greater than 10^{-4} require further evaluation and may indicate a need for remedial action.

Potential concern for noncarcinogenic effects of a single contaminant in a single medium is expressed as the hazard quotient (HQ) (or the ratio of the estimated intake derived from the contaminant concentration in a given medium to the contaminant's RfD). By adding the HQs for all contaminants within a medium or across all media to which a given population may reasonably be exposed, one can generate the hazard index (HI). The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. U.S. EPA has also established guidelines for noncancer risks. If these guidelines are used, an HI of less than 1 is generally considered protective of human health. If the HI is greater than 1, the chemicals are assessed to determine whether the HI represents an unacceptable noncarcinogenic human-health risk.

7.1.4.1 INCREMENTAL RISK

Metals are natural components of the earth's crust. Some of the metals are carcinogenic and therefore present a cancer risk at naturally occurring (background) concentrations. Human-caused release of a carcinogenic metal to an environment where the metal already exists does not create risk; it increases risk. The increase is called "incremental risk." For each of the carcinogenic metals identified at the no action sites, background threshold concentrations and incremental cancer risk estimates were calculated.

Incremental carcinogenic risk was estimated by subtracting background threshold risk for metals from their corresponding total lifetime risk. In general, this comparison is applicable only to inorganic contaminants because the organic contaminants analyzed are usually man-made (U.S. EPA 1989) and their background concentrations are zero. The incremental cancer risk values for the carcinogenic metals were combined with the total cancer risk values for the other carcinogens (i.e., organics) to obtain the total risk estimate for each site and AOC. This combined risk is referred to as the incremental lifetime cancer risk.

Incremental risk was estimated only for the carcinogenic metal COPCs. Naturally occurring carcinogenic chemicals present a cancer risk at their background concentrations. Whether background risk is acceptable or is not acceptable, it cannot be reduced. When site operations result in an increase in the concentration of a naturally occurring carcinogen above its background level, risk increases. For any naturally occurring carcinogen found at a concentration above background, it is necessary to estimate the risk presented by the excess amount and use this value in decision making.

Incremental noncancer risk was not calculated for the systemic toxicants because noncarcinogenic effects have thresholds. If the background concentration of a noncarcinogen does not produce an exposure level above the toxicity threshold, it poses no risk of adverse health effects. However, if as a result of site operations the concentration of the noncarcinogen increases above background and reaches a concentration that produces an exposure level above the toxicity threshold, the noncarcinogen will then have a potential for

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causing adverse health effects. The potential for adverse health effects may now be present where it did not previously exist. Thus, with noncarcinogenic effects, it is necessary to estimate the likelihood of systemic effects presented by the total concentration (background plus the amount above background) and to use that estimate in decision making.

7.1.4.2 RISK DRIVERS

Risk drivers were identified for all ESI and RI sites. A risk driver is defined as a COPC that has one or more of the following characteristics:

- an individual cancer risk estimate exceeding 1×10^{-6} ;
- a cancer risk estimate that is less than 1×10^{-6} but that, when combined with other COPCs with cancer risk estimates less than 1×10^{-6} , causes the sum of the cancer risk estimates to exceed 1×10^{-6} ;
- an HI larger than 1.0; or
- an HI that is less than 1.0 but that, when combined with COPCs with the same mechanisms of toxic action and hazard indices also less than 1.0, causes the sum of the hazard indices to be larger than 1.0.

7.2 SCREENING RISK ASSESSMENT APPROACH

A screening risk assessment was used for the RFA AOCs to conservatively estimate the potential risk posed by COPCs at a site. A screening risk assessment was also performed for IRP-9B before the non-time-critical removal action. The screening risk assessment was performed on the combined highest measured concentrations of COPCs identified in soil (i.e., cumulative risk) within the boundary of the AOC site. All assessments for the AOCs were performed using validated off-site laboratory data.

COPCs in soil were screened against the most current U.S. EPA PRGs and/or Cal-modified PRGs published by U.S. EPA Region IX for chemicals in residential and industrial soil by calculating the ratio of the PRGs and the COPC concentration in soil. The residential scenario is considered to be the most conservative because of the duration of exposure and number of exposure pathways. The PRGs for soil are based on exposure by soil ingestion, inhalation of airborne soil (dust), inhalation of chemical vapors released from soil (if volatile compounds are present), and dermal contact with soil. Worst-case risks were estimated using the highest measured concentration in the calculation of the ratios.

The ratios were used to derive a worst-case HI for each COPC and a worst-case cancer risk value for each carcinogenic COPC. For each risk category (carcinogenic or noncarcinogenic), the risk values of the individual COPCs were summed to obtain an estimate of total noncancer risk and total cancer risk. The same approach for identifying risk drivers used in the baseline risk assessment was used for the screening risk assessment (Section 7.1.4.2).

7.3 EXPANDED SITE INSPECTION SITES

Table 7-2 summarizes quantitative incremental cancer risk estimates, HIs (noncancer risk), and risk drivers associated with the COPCs at the ESI sites.

7.3.1 IRP-2, Oil Disposal Area

Human-health risks at IRP-2 were evaluated in the ESI through a baseline risk assessment based on a residential (soil and groundwater) scenario. IRP-2 is a site where a soil hot spot was identified. The hot spot was a localized area where PAH compounds were found at concentrations totaling more than 10,000 µg/kg in near-surface soil. In June 1997, the DON completed a non-time-critical removal action for this localized area. The first entry for IRP-2 on Table 7-2 shows the estimated risk based on concentrations of COPCs reported in soil during the ESI. The last entry for IRP-2 was calculated in the ESI based on the removal of the soil within the hot spot. Under these conditions, incremental cancer risk due to exposure to soil is within the range considered generally allowable by U.S. EPA. Noncancer risk exceeds the threshold limit of 1.0. The primary contributors to risk are metals (arsenic, manganese, and aluminum). However, the results of a geochemical evaluation performed during the ESI indicate that the concentrations of metals in soil at IRP-2 are within the range of naturally occurring variations of metals at MCAF Tustin (i.e., not resulting from site-specific base operations). Also, the ESI vadose zone transport model indicated that soil COPCs would not migrate to groundwater at concentrations exceeding tap water PRGs. Therefore, soil at IRP-2 was recommended for no further action.

The incremental cancer risk associated with groundwater at IRP-2 was quantified in the ESI at 9.2×10^{-4} and the noncancer risk at 58. The primary risk drivers were metals (arsenic, molybdenum, selenium). Because the groundwater cancer and noncancer risk estimates exceeded the guidelines established by U.S. EPA, groundwater at this site was evaluated further in the OU-1/OU-2 RI. The RI evaluated COPCs in groundwater throughout the facility and concluded that the metals in the groundwater at IRP-2 are within the range of naturally occurring variations of metals at MCAF Tustin. Therefore, risks in groundwater were not due to site-specific base operations. Based on this evaluation, groundwater at IRP-2 was recommended for no further action.

7.3.2 IRP-9, Hangar No. 1 Line Shacks and Apron 1

Human-health risks at IRP-9 were evaluated in the ESI for IRP-9A through a baseline risk assessment based on a residential (soil and groundwater) and recreational scenario, and in the PAH Apron Study for IRP-9B through a screening risk assessment. IRP-9A is a site where two soil hot spots were identified. The hot spots were localized areas where PAH compounds were found at concentrations totaling up to 6,900 µg/kg (of benzo[a]pyrene) in near-surface soil. Between July 1997 and September 1997, the DON completed a removal action for IRP-9A. The first entry for IRP-9A on Table 7-2 shows the estimated risk based on concentrations of COPCs reported in soil during the ESI. The last entry for IRP-9A was calculated after the removal of the soil within the hot spots (BNI 1998b).

Table 7-2
No Action Sites – Summary of Human-Health Risk Results for the ESI Sites

IRP Site	ESI EVALUATION											RI EVALUATION	CLOSURE REPORT EVALUATION ^a		
	Soil						Groundwater								
	Baseline Risk Assessment ^b						ESI Fate and Transport Analysis/Geochemical Evaluation ^c				Baseline Risk Assessment ^b		Basewide Groundwater Study	Soil After Non-Time-Critical Removal Action	
	Residential Risk/ Risk Drivers		Industrial Risk/ Risk Drivers		Recreational Risk/ Risk Drivers		Evaluation		Risk Assessment ^d / COPCs		Residential Risk/ Risk Driver		Evaluation Rationale ^e / Evaluation Results	Residential Risk Assessment ^f / Risk Driver	
	Cancer Risk ^g	HI	Cancer Risk	HI	Cancer Risk ^g	HI	Evaluation		Cancer Risk	HI	Cancer Risk	HI		Cancer Risk	HI
IRP-2	1.0 × 10 ⁻⁴ Arsenic Benzo(a)pyrene	2.9 Manganese Arsenic Aluminum	NA	NA	NA	NA	• Leaching evaluation (vadose zone transport model) indicates that all COPCs are below the tap water PRG. • Geochemical evaluation indicates that metals in soil (manganese) are within the naturally occurring range and not the result of base operations.		NA	NA	9.2 × 10 ⁻⁴ Arsenic	58 Molybdenum Arsenic Selenium	• Groundwater was recommended for evaluation in the RI (geochemical evaluation) due to the existing carcinogenic and noncarcinogenic risks as determined by the ESI groundwater screening risk assessment. • The RI geochemical evaluation indicates that metals in groundwater are within the naturally occurring range. Thus, risks are not due to site-specific activities. • It is unlikely that groundwater would be used for drinking water purposes ^h . • Groundwater was recommended for no further action in the RI.	1.0 × 10 ⁻⁵ Arsenic Benzo(a)pyrene	2.6 Manganese Arsenic Aluminum
IRP-9A	4.7 × 10 ⁻⁴ (T) 4.4 × 10 ⁻⁴ (I) Benzo(a)pyrene Dibenz(a,h)anthracene Arsenic Benzo(a)anthracene Benzo(k)fluoranthene Benzo(b)fluoranthene	1.1 Trichloro-ethene Arsenic	NA	NA	2.9 × 10 ⁻⁵ (T) Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(a)anthracene Benzo(k)fluoranthene Benzo(b)fluoranthene	0.026 None	• Leaching evaluation (vadose zone transport model) indicated that 12 COPCs in soil have the potential to impact groundwater at concentrations exceeding the MCLs and/or PRGs. • Groundwater modeling used to verify leaching evaluation indicates that cyanide may impact groundwater above its MCL in the future. Cyanide reported in vadose zone soil is found within the area to be remediated as part of the removal action for IRP-9A.		NA	NA	1.8 × 10 ⁻⁵ Methylene chloride Trichloroethene 1,1,2,2-PCA 1-4-dichlorobenzene	0.65 None	• Groundwater was recommended for no further action in the ESI.	4.0 × 10 ⁻⁶ (T)	< 1
IRP-9B ⁱ	Subarea 1: 2.45 × 10 ⁻⁴ Subarea 3: 1.27 × 10 ⁻⁴	Subarea 1: 0.02204 Subarea 3: 0.01147	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	Subarea 1: 1.2 × 10 ⁻⁶ (I) Subarea 3: 1.5 × 10 ⁻⁶ (I)	Subarea 1: < 1 Subarea 3: < 1

(table continues)

Table 7-2 (continued)

Notes:

- ^a risk assessment for IRP-2 conducted assuming hot spot had been removed (BNI 1996a); risk assessments for IRP-9A and IRP-9B conducted following non-time-critical removal action (BNI 1998b; OHM 2000a)
- ^b risk estimates presented are based on baseline risk assessment calculations
- ^c fate and transport analysis performed in the ESI to ascertain whether COPCs in soil represent a potential future release to groundwater; a leaching evaluation procedure quantified the potential future release to groundwater
- ^d a screening risk assessment was performed only on those soil chemicals identified by the ESI leaching evaluation as having the potential to affect groundwater at a concentrations above the tap water PRG
- ^e RI risk based on the fate and transport analysis results; sites addressed were those reported to have groundwater risks greater than 1×10^{-6} . The assessment was limited to the residential receptor. Risks were based on a 30-year average concentration
- ^f risk estimates presented are based on screening risk assessment for IRP-2 and baseline risk assessment calculations for IRP-9A and IRP-9B
- ^g first estimate is the total cancer risk (T), the second estimate is the incremental cancer risk (I); for sites where the total and the incremental cancer risk are identical, the estimate listed represents both the total and the incremental cancer risk (T/I); incremental cancer risk estimates quantified by subtraction of background cancer risk for the carcinogenic metals from the total cancer risk; the risk drivers presented are those associated with the incremental cancer risk
- ^h groundwater in the first water-bearing zone is of poor quality, and the yield is low
- ⁱ screening risk evaluation conducted before removal action in PAH Apron Study (BNI 1998a)

Acronyms/Abbreviations:

COPC – chemical of potential concern
ESI – expanded site inspection
HI – hazard index
(I) – incremental cancer risk
IRP – Installation Restoration Program
MCL – maximum contaminant level
NA – not applicable
PAH – polynuclear aromatic hydrocarbon
PCA – tetrachloroethane
PRG – preliminary remediation goal
RI – remedial investigation
(T) – total cancer risk

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Following the removal action at IRP-9A, the excess cancer risk was 4.0×10^{-6} for the resident adult and the noncancer risk was less than 1.0.

The incremental cancer risk associated with groundwater at IRP-9A was quantified in the ESI at 1.8×10^{-5} and the noncancer risk was less than 1. The primary risk drivers were methylene chloride, TCE, 1,1,2,2-tetrachloroethane (PCA), and 1,4-dichlorobenzene. A fate and transport analysis performed for IRP-9A indicated that cyanide in the vadose zone soil has the potential to impact groundwater at concentrations exceeding the MCL. However, the cyanide detected in the vadose zone soil was found within the area to be remediated as part of the removal action at IRP-9A. Therefore, subsequent to the removal action at IRP-9A, no further action was recommended for soil or groundwater (BNI 1996a; OHM 2000a). Although groundwater at IRP-9 does not require remediation because no site-specific releases occurred, the site is located adjacent to a large VOC plume that originates at an OU-1 site, IRP-13S. Therefore, groundwater at IRP-9 is being addressed under the remedial action for OU-1.

During the removal action at IRP-9A, two additional areas with PAH-contaminated surface soil were identified as requiring remediation. These areas were subsequently designated as IRP-9B (BNI 1998). A screening risk assessment was performed as part of the PAH Apron Study (BNI 1998) to evaluate risks prior to the removal action at IRP-9B. The results are shown in Table 7-2. Following the non-time-critical removal action, a baseline risk assessment was conducted using analytical results for each final confirmation sample from IRP-9B (OHM 2000a). Using a residential scenario, an incremental excess cancer risk of 1.2×10^{-6} was calculated for Subarea 1 of IRP-9B, and an incremental excess cancer risk of 1.5×10^{-6} was calculated for Subarea 3 of IRP-9B (OHM 2000a). PAHs were the primary COPCs. The main risk driver was benzo(a)pyrene, which contributed from 58 to 67 percent of the excess risk. No individual chemical contributed more than 1×10^{-6} to the excess cancer risk. The noncancer risk at IRP-9B was less than 1 before and after the removal action (BNI 1998; OHM 2000b). These levels are within the range considered to be generally allowable by U.S. EPA.

The future land use at IRP-9A and IRP-9B is planned to be a combination of urban regional park, training facility, commercial business, and community core (potential residential). Given the wide range of the future land development, the conservative receptor of a resident was chosen. As noted above, under the residential scenario, the excess cancer risk was 4.0×10^{-6} (IRP-9A), 1.2×10^{-6} (IRP-9B, Subarea 1), and 1.5×10^{-6} (IRP-9B, Subarea 3). Because the excess cancer risks calculated on the basis of residual concentrations of chemicals present after the removal actions at IRP-9A and IRP-9B were within the generally allowable risk range, a risk management decision to recommend no further action for soil was made based on the results of the risk evaluation and the following site-specific conditions.

- The conservative nature of the baseline risk assessment assumes that a resident will live at the site for 30 years and be exposed to chemicals down to 10 feet bgs for 50 weeks each year.

- The residual excess cancer risks for a residential scenario were only slightly greater than 1×10^{-6} , a value considered allowable by U.S. EPA.
- There is no potential for future release to groundwater at concentrations exceeding water quality criteria because of the low mobility of PAHs and their affinity to remain in the soil.

7.4 RFA AOCs

Table 7-3 summarizes quantitative incremental cancer risk estimates, HIs (noncancer risk), and risk drivers associated with the COPCs at the RFA sites.

7.4.1 AOC AD-04, Air-Photo-Identified Possible Disposal Trench

Human-health risks as AD-04 were evaluated during the RFA through a screening risk assessment based on a residential (soil and groundwater) and an industrial (soil) scenario (Table 7-3). Under both scenarios, total excess carcinogenic risks caused by COPCs in soil are within the range considered generally allowable by U.S. EPA. Under the residential scenario, the incremental excess cancer risk was 1.5×10^{-6} . Beryllium was responsible for 70 percent of this risk. Aroclor 1260 was responsible for 16 percent of the excess cancer risk under the residential scenario, but the risk associated with Aroclor 1260 was less than 1×10^{-6} . Under the industrial scenario, the incremental excess cancer risk was less than 1×10^{-6} . Noncarcinogenic risks from exposure to soil COPCs are below the threshold of 1.0.

Because the excess cancer risks for soil at AD-04 were within the generally allowable risk range, a risk management decision to recommend no further action for soil was made on the basis of results of the risk evaluation and the following site-specific conditions.

- Although the highest measured concentration of beryllium exceeded the PRG, the distribution of concentrations exceeding the PRG was generally limited to 10 feet bgs.
- The results of the fate and transport analysis indicated a potential release of chloroform to groundwater at concentrations exceeding water-quality criteria; however, the risk is within the allowable range.
- The existing or future risk to human health resulting from the presence of the COPCs in soil, based on proposed future land use as commercial business, is within the allowable range.

A leaching evaluation performed for the RFA identified one soil COPC (chloroform) that had the potential to affect groundwater at a concentration above the tap water PRG. Because the modeled potential future release concentration for chloroform exceeded the tap water PRG, a screening risk assessment for this COPC in groundwater was conducted. The results of the risk assessment for chloroform (Table 7-3) indicate that incremental cancer risk is within the range considered generally allowable by U.S. EPA and the noncarcinogenic risk is below the threshold of 1.0. However, because the cancer risk exceeded 10^{-6} , soil leaching potential was investigated further during the RI.

Table 7-3
No Action Sites – Summary of Human-Health Risk Results for the RFA AOCs

AOCs	RFA EVALUATION									RI EVALUATION	CLOSURE REPORT EVALUATION				
	Soil							Groundwater							
	Screening Risk Assessment				RFA Fate and Transport Analysis ^a				Screening Risk Assessment		Basewide Groundwater Study ^b		Soil After RCRA Action		
	Residential Risk ^c / Risk Drivers		Industrial Risk ^c / Risk Drivers		Evaluation		Screening Risk Assessment ^{c,d} / COPCs		Residential Risk ^c / Risk Drivers		Evaluation Rationale/Evaluation Results		Residential Risk Assessment		
	Cancer Risk ^e	HI	Cancer Risk	HI		Cancer Risk	HI	Cancer Risk	HI			Cancer Risk	HI		
AD-04	9.3 × 10 ⁻⁶ (T) 1.5 × 10 ⁻⁶ (I) Beryllium Aroclor 1260	0.69 None	1.3 × 10 ⁻⁶ (T) 2.5 × 10 ⁻⁷ (I) None	0.009 None	Leaching evaluation indicates that chloroform has the potential to affect groundwater at concentrations exceeding the tap water PRG.	5.6 × 10 ⁻⁶ Chloroform	0.015 Chloroform	1.9 × 10 ⁻⁴ (T) 1.3 × 10 ⁻⁴ (I) Chromium VI	2.3 Molybdenum	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (geochemical evaluation and a leaching evaluation) due to the existing carcinogenic and noncarcinogenic risks as determined by the RFA groundwater screening risk assessment.RI geochemical evaluation indicates that metals in groundwater are within the naturally occurring range^f.RI leaching evaluation indicates chloroform in soil (30-year average) leaching to groundwater will be below the tap water PRG.Groundwater was recommended for no further action in the RI.	NA	NA			
AS-06	2.8 × 10 ⁻⁹ None	0.002 None	1.3 × 10 ⁻⁹ None	<0.001 None	Leaching evaluation indicates that chloroform has the potential to affect groundwater at concentrations exceeding the tap water PRG.	5.6 × 10 ⁻⁶ Chloroform	0.015 Chloroform	NA ^g	NA ^g	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (leaching evaluation) due to a potential future release to groundwater from chloroform in soil (as determined by the RFA fate and transport analysis) with possible health risk.RI leaching evaluation indicates chloroform in soil (30-year average) leaching to groundwater will be below the tap water PRG.Groundwater was recommended for no further action in the RI.	NA	NA			
AS-08	2.7 × 10 ⁻⁷ (T) 6.7 × 10 ⁻⁸ (I) None	1.0 None	2.0 × 10 ⁻⁸ None	0.064 None	Leaching evaluation indicates that chloromethane, PCE, and 1,1,2,2-tetrachloroethane have the potential to affect groundwater at concentrations exceeding the tap water PRG.	6.4 × 10 ⁻⁶ Chloromethane PCE 1,1,2,2-tetrachloroethane	0.033 Chloromethane PCE 1,1,2,2-tetrachloroethane	NA ^g	NA ^g	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (leaching evaluation) due to a potential future release to groundwater from chloromethane, PCE, and 1,1,2,2-tetrachloroethane in soil (as determined by the RFA fate and transport analysis) with possible health risk.RI leaching evaluation indicates chloromethane, PCE, and 1,1,2,2-tetrachloroethane in soil leaching to groundwater (30-year average) will be below the tap water PRG.Groundwater was recommended for no further action in the RI.	NA	NA			
AST-02	NA ^h	NA ^h	NA ^h	NA ^h	NA ^h	NA ^h	NA ^h	5.5 × 10 ⁻⁴ (T) 4.9 × 10 ⁻⁴ (I) Chromium VI ⁱ	1.3 Cadmium Chromium VI ⁱ	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (geochemical evaluation) due to the existing carcinogenic and noncarcinogenic risks (as determined by the RFA groundwater risk assessment).	NA	NA			

(table continues)

Table 7-3 (continued)

AOCs	RFA EVALUATION										CLOSURE REPORT EVALUATION	
	Soil							Groundwater				
	Screening Risk Assessment				RFA Fate and Transport Analysis ^a			Screening Risk Assessment		RI EVALUATION		
	Residential Risk ^c / Risk Drivers		Industrial Risk ^c / Risk Drivers		Evaluation	Screening Risk Assessment ^{c,d} / COPCs		Residential Risk ^c / Risk Drivers		Basewide Groundwater Study ^b		
	Cancer Risk ^c	HI	Cancer Risk	HI		Cancer Risk	HI	Cancer Risk	HI	Evaluation Rationale/Evaluation Results	Soil After RCFR Action	
AST-02 (cont.)										<ul style="list-style-type: none">RI geochemical evaluation indicates that metals in groundwater are within the naturally occurring range^f.AST-02 was recommended for no further action in the RI.		
AST-04	3.7 × 10 ⁻⁶ (T) 3.2 × 10 ⁻⁶ (I) Benzo(a)pyrene Benz(a)anthracene Benzo(b)fluoranthene	0.002 None	7.7 × 10 ⁻⁷ (T) 7.0 × 10 ⁻⁷ (I) None	<0.001 None	Leaching evaluation indicates that the organic COPCs are below the tap water PRG.	NA	NA	NA ^j	7.9 Manganese Molybdenum	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (geochemical evaluation) due to the existing noncarcinogenic risk (as determined by the RFA groundwater risk assessment).RI geochemical evaluation indicates that metals in groundwater are within the naturally occurring range^f.Groundwater was recommended for no further action in the RI.	NA	NA
MDA-04	5.7 × 10 ⁻⁵ (T) 1.1 × 10 ⁻⁵ (I) Arsenic	0.99 None	9.0 × 10 ⁻⁶ (T) 1.7 × 10 ⁻⁶ (I) Arsenic	0.058 None	Leaching evaluation indicates that the organic COPCs are below the tap water PRG.	NA	NA	9.2 × 10 ⁻⁶ 1,2-dichloroethane	0.083 None	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (geochemical evaluation and an evaluation of future impact) due to the existing carcinogenic risk (as determined by the RFA groundwater risk assessment).The RI geochemical evaluation indicates that metals in groundwater are within the naturally occurring range^f.The RI evaluated the maximum reported concentration of 1,2-DCA and concluded that it would have negligible future impact.The RI recommended no further action for groundwater.	NA	NA
MDA-07	4.7 × 10 ⁻⁵ (T) 5.3 × 10 ⁻⁷ (I) None	0.81 None	7.4 × 10 ⁻⁶ (T) 8.5 × 10 ⁻⁸ (I) None	0.047 None	Leaching evaluation indicates that TCE has the potential to affect the groundwater at concentrations exceeding the tap water PRG.	9.4 × 10 ⁻⁶ TCE	0.41 TCE	NA ^g	NA ^g	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (leaching evaluation) due to a potential future release to groundwater from TCE in soil (as determined by the RFA fate and transport analysis).RI leaching evaluation indicates TCE in soil (30-year average) leaching to groundwater will be below the tap water PRG.	NA	NA
MMS-01	1.4 × 10 ⁻⁷ None	<0.001 None	3.3 × 10 ⁻⁸ None	<0.001 None	Leaching evaluation indicates that methylene chloride has the potential to affect the groundwater at concentrations exceeding the tap water PRG.	1.4 × 10 ⁻⁶ Methylene chloride	<0.001 Methylene chloride	NA ⁱ	NA ⁱ	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (leaching evaluation) due to a potential future release to groundwater from methylene chloride in soil as determined by the RFA fate and transport analysis.The RI leaching evaluation indicates methylene chloride (30-year average) leaching from soil to groundwater will be below the tap water PRG.	NA	NA

(table continues)

Table 7-3 (continued)

AOCs	RFA EVALUATION										CLOSURE REPORT EVALUATION			
	Soil							Groundwater						
	Screening Risk Assessment				RFA Fate and Transport Analysis ^a			Screening Risk Assessment			RI EVALUATION		CLOSURE REPORT EVALUATION	
	Residential Risk ^c / Risk Drivers		Industrial Risk ^c / Risk Drivers		Evaluation		Screening Risk Assessment ^{c,d} / COPCs	Residential Risk ^c / Risk Drivers			Basewide Groundwater Study ^b		Soil After RCFR Action	
	Cancer Risk ^e	HI	Cancer Risk	HI			Cancer Risk	HI	Cancer Risk	HI	Evaluation Rationale/Evaluation Results		Cancer Risk	HI
MWA-03 ^m	2.1 × 10 ⁻⁴ (T) 1.7 × 10 ⁻⁴ (I) Arsenic	3.7 Arsenic	3.4 × 10 ⁻⁵ (T) 2.6 × 10 ⁻⁵ (I) Arsenic	0.21 None	Leaching evaluation indicates that VOCs are below the tap water PRG and that metals (arsenic) are below background.		NA	NA	8.1 × 10 ⁻⁴ (T) 5.5 × 10 ⁻⁴ (I) Arsenic Chromium	16 Thallium Arsenic	<ul style="list-style-type: none">Groundwater was recommended for evaluation in the RI (geochemical evaluation) due to the existing carcinogenic and noncarcinogenic risks (as determined by the RFA groundwater risk assessment).Based on a review of the RI geochemical evaluation, metals in groundwater are within the naturally occurring range^f.The RI recommended no further action for groundwater.		4.65 × 10 ⁻⁵ (T) 0 (I)	< 1

Notes:

- ^a fate and transport analysis performed in the RFA to ascertain whether COPCs in soil represent a potential future release to groundwater; a leaching evaluation procedure quantified the potential future release to groundwater
- ^b geochemical evaluation and fate and transport analysis performed in the RI to assess COPCs in groundwater
- ^c risk estimates presented are based on screening risk assessment calculations
- ^d a screening risk assessment was performed only on those soil chemicals identified by the RFA leaching evaluation as having the potential to affect groundwater at a concentrations above the tap water PRG
- ^e first estimate is the total cancer risk (T), the second estimate is the incremental cancer risk (I); for sites where the total and the incremental cancer risk are identical, the estimate listed represents both the total and the incremental cancer risk;
- ^f incremental cancer risk estimates quantified by subtraction of background cancer risk for the carcinogenic metals from the total cancer risk; the risk drivers presented are those associated with the incremental cancer risk
- ^g risks are not due to site-specific activities
- ^h groundwater sampling was not conducted
- ⁱ no soil sampling was conducted, therefore there are no data to identify COPCs in soil, and no fate and transport analysis was conducted
- ^j chromium is assumed to be hexavalent
- ^k no carcinogenic COPCs were identified
- ^l no fate and transport analysis was conducted because the initial release occurred near the water table
- ^m the arsenic HI is higher than expected for the whole area because the highest concentration was used to calculate the HI; arsenic was reported in only one sample at a concentration above the background level
- ⁿ subsequent to the RFA soil risk assessment, a soil removal action was completed at MWA-03

Acronyms/Abbreviations:

AOC – area of concern
 COPC – chemical of potential concern
 HI – hazard index
 (I) – incremental cancer risk
 NA – not applicable
 PCE – tetrachloroethene
 PRG – preliminary remediation goal
 RCRA – Resource Conservation and Recovery Act
 RFA – RCRA facility assessment
 RI – remedial investigation
 (T) – total cancer risk
 TCE – trichloroethene
 VOC – volatile organic compound

Section 7 Summary of Site Risks

The results of the RFA groundwater screening risk assessment indicate that the concentrations of the groundwater COPCs are high enough to cause noncarcinogenic and carcinogenic effects (Table 7-3). The carcinogenic COPC accounting for most of the cancer risk was chromium. Molybdenum was identified as the COPC accounting for the majority of the groundwater noncancer risk. Based on these results, groundwater at AD-04 was recommended for further evaluation during the RI.

The RI further evaluated COPCs in soil and groundwater through a geochemical evaluation and leaching analysis. The results of the geochemical evaluation indicated that the concentrations of metals in the groundwater are within the range of naturally occurring variations of these metals at MCAF Tustin. This indicates that the presence of these COPCs at AD-04 is probably not the result of site-related activities. The leaching analysis estimated that the 30-year average groundwater concentration of chloroform in the first WBZ would be below the tap water PRG. Hence, soil COPCs do not have the potential to adversely affect the groundwater. Based on this evaluation, the RI Report recommended groundwater at AD-04 for no further action.

7.4.2 AOC AS-06, Air-Photo-Identified Possible Temporary Storage Unit

Human-health risks at AS-06 were evaluated in the RFA through a screening risk assessment based on residential and industrial exposure to soil COPCs. Groundwater sampling was not conducted at AS-06 (Table 7-3). Carcinogenic and noncarcinogenic risks from COPCs in soil are within the range considered allowable by U.S. EPA. Based on this evaluation, soil at AS-06 was recommended for no further action.

A leaching evaluation performed in the RFA identified one soil COPC (chloroform) that had the potential to affect groundwater at a concentration above the tap water PRG. Because the modeled potential future release concentration for chloroform exceeded the tap water PRG, a screening risk assessment for this COPC in groundwater was conducted in the RFA. The results of the risk assessment (Table 7-3) indicate that the cancer risk is within the range considered generally allowable by the U.S. EPA. Noncarcinogenic risks are estimated below the threshold limit of 1.0. However, because the incremental cancer risk exceeded 10^{-6} , soil leaching potential was investigated further during the RI.

Groundwater at AS-06 was evaluated further in the RI through leaching analysis under the basewide groundwater modeling study. This analysis estimated that the 30-year average groundwater concentration of chloroform in the first WBZ would be below the tap water PRG. Based on this evaluation, the RI Report recommended groundwater at AS-06 for no further action.

7.4.3 AOC AS-08, Air-Photo-Identified Storage Area

Human-health risks at AS-08 were evaluated in the RFA through a screening risk assessment based on residential and industrial exposure to soil COPCs. Groundwater sampling was not conducted at AS-08 (Table 7-3). Carcinogenic and noncarcinogenic

risks due to COPCs in soil were within the range considered allowable by U.S. EPA. Based on this evaluation, soil at AS-08 was recommended for no further action.

A leaching evaluation performed in the RFA identified three VOCs (1,1,2,2-PCA, chloromethane, and PCE) as having the potential to affect groundwater at a concentration above tap water PRGs. Because the modeled potential future release concentration for these VOCs exceeded the tap water PRG, a screening risk assessment for these VOCs in the groundwater was conducted. The results of the risk assessment (Table 7-3) indicate that cancer risk is within the range considered generally allowable by U.S. EPA. Noncarcinogenic risks are below the threshold limit of 1.0. However, because the cancer risk exceeded 10^{-6} , the soil leaching potential was investigated further in the RI.

Groundwater at AS-08 was evaluated further during the RI through a leaching analysis under the basewide groundwater modeling study. This analysis estimated that the 30-year average groundwater concentration of 1,1,2,2-PCA, chloromethane, and PCE in the first WBZ would be less than two times the residential PRGs for these compounds. Because the estimated concentrations were only slightly greater than the PRGs, the RI recommended that further action was not necessary to prevent COPCs in soil from migrating to groundwater at AS-08. Although groundwater at AS-08 does not require remediation because no site-specific releases occurred, the site is located within a large VOC plume that originates at an OU-1 site, IRP-3. Therefore, groundwater at AS-08 is being addressed under the remedial action for OU-1.

7.4.4 AOC AST-02, Air-Photo-Identified Possible Aboveground Storage Tank

Because of the presence of a parking apron that covers the site and acts as a barrier to drilling, soil sampling was not conducted at AST-02. Groundwater samples were collected at the edge of the apron, downgradient of the AOC, as an indirect measure of possible soil contamination. Therefore, human-health risks at AST-08 were evaluated during the RFA through a residential screening risk assessment based on COPCs in groundwater at a downgradient location. Results indicate that both carcinogenic and noncarcinogenic risks exceed the range considered generally allowable by U.S. EPA (Table 7-3). Risk drivers include chromium (hexavalent) and cadmium. No VOCs were reported in the groundwater. Based on this assessment, groundwater at AST-02 was recommended for further evaluation in the RI Report.

Metals in groundwater at AST-02 were evaluated further during the RI through a geochemical evaluation. This evaluation demonstrated that the concentrations of chromium and cadmium in groundwater at the AOC are within the range of naturally occurring variation of these metals at MCAF Tustin. This indicates that the presence of these COPCs at AST-02 did not result from site-related activities. Based on this evaluation, the RI recommended AST-02 for no further action.

Section 7 Summary of Site Risks

7.4.5 AOC AST-04, Air-Photo-Identified Storage Unit

Human-health risks at AST-04 were evaluated during the RFA through a screening risk assessment based on residential (soil and groundwater) and industrial (soil) scenarios (Table 7-3). Incremental carcinogenic risks caused by COPCs in soil are within the range considered generally allowable by U.S. EPA. Under the residential scenario, the incremental excess cancer risk was 3.2×10^{-6} . Benzo(a)pyrene was the main risk driver, contributing 66 percent of the excess cancer risk. No other chemical contributed more than 1×10^{-6} to the excess cancer risk. Under the industrial scenario, the incremental excess cancer risk was less than 1×10^{-6} . Noncarcinogenic risks from exposure to soil COPCs are below the threshold of 1.0. Additionally, a leaching analysis performed for the RFA did not identify any soil COPC that represents a potential future release to groundwater at concentrations exceeding background levels and PRGs.

Because the excess cancer risks for soil at AST-04 were within the generally allowable risk range, a risk management decision to recommend no further action for soil was made based on the results of the risk evaluation and the following site-specific conditions.

- Benzo(a)pyrene was reported at above-PRG concentrations in only one sample at 1 foot bgs.
- The remaining COPCs in soil do not present an unacceptable excess cancer risk.
- There is no potential for future release to groundwater at concentrations exceeding water-quality criteria.

Three groundwater COPCs were identified in RFA samples. None were carcinogenic. However, the total HI was 7.9; manganese and molybdenum are the primary noncarcinogenic risk drivers. Because the HI exceeded 1, groundwater was recommended for further evaluation during the RI.

Metals in groundwater were evaluated further in the RI through a geochemical evaluation under the basewide groundwater modeling study. This evaluation indicated that the concentrations of metals in groundwater at AST-04 are within the range of naturally occurring variations of these metals at MCAF Tustin. This indicates that the presence of these COPCs at AST-04 did not result from site-related activities. Therefore, no further action was recommended for groundwater at this AOC.

7.4.6 AOC MDA-04, Miscellaneous Disposal Area

Human-health risks at MDA-04 were evaluated during the RFA through a screening risk assessment based on residential (soil and groundwater) and industrial (soil) scenarios (Table 7-3). Incremental cancer risks caused by COPCs in soil were within the range considered generally allowable by U.S. EPA. Under the residential scenario, the incremental excess cancer risk was 1.1×10^{-5} . Arsenic was the main risk driver, contributing 1.0×10^{-5} of the excess cancer risk under this scenario. No other chemical contributed more than 1×10^{-6} to the excess cancer risk. Arsenic was also the risk driver for the incremental cancer risk under the industrial scenario. Noncarcinogenic risks from

exposure to soil COPCs are below the threshold of 1.0. Additionally, a leaching analysis performed for the RFA did not identify any soil COPC that represents a potential future release to groundwater at concentrations exceeding background levels and PRGs.

Because the excess cancer risks for soil at AST-04 were within the generally allowable risk range, a risk management decision to recommend no further action for soil was made based on the results of the risk evaluation and the following site-specific conditions.

- Organic COPCs do not contribute to the excess cancer risk.
- The risk driver, arsenic, is found only at 10 feet bgs. The occurrence of arsenic at this location does not appear to be related to a release.
- There is no potential for a release from soil to groundwater at concentrations exceeding water-quality criteria.

The RFA screening risk assessment results for groundwater indicated that incremental cancer risks due to groundwater COPCs were within the range considered generally allowable by U.S. EPA. 1,2-dichloroethane (DCA) was the only risk driver. However, because the incremental cancer risk due to 1,2-DCA exceeded 10^{-6} , groundwater at MDA-04 was recommended for further evaluation in the RI.

COPCs in groundwater were evaluated further in the RI through a geochemical evaluation (for metals) and an evaluation of future impact (for 1,2-DCA). The results of the geochemical evaluation performed during the RI indicate that the concentrations of metals (molybdenum) in groundwater at MDA-04 are within the range of naturally occurring variations of metals at MCAF Tustin. The RI also evaluated the maximum reported concentration of 1,2-DCA and concluded that it would have negligible future impact. Therefore, the RI Report recommended no further action for groundwater at MDA-04. Although groundwater at MDA-04 does not require remediation because no site-specific releases occurred, the AOC is adjacent to a large VOC plume at an OU-1 site, IRP-13S. Therefore, the groundwater at MDA-04 is being addressed under the remedial action for OU-1.

7.4.7 AOC MDA-07, Miscellaneous Disposal Area

Human-health risks at MDA-07 were evaluated during the RFA through a screening risk assessment based on residential and industrial exposure to soil COPCs (Table 7-3). Groundwater sampling was not conducted at MDA-07. Incremental cancer risks and noncancer risks due to COPCs in soil are within the range considered allowable by U.S. EPA. Based on this evaluation, soil at MDA-07 was recommended for no further action.

A leaching analysis performed for the RFA identified TCE in soil as having the potential to affect groundwater at a concentration above the tap water PRG. Arsenic also had the potential to affect groundwater above the tap water PRG but below the background concentration. Therefore a screening risk assessment was performed only for the modeled TCE concentration. The results of the risk assessment (Table 7-3) indicate that

Section 7 Summary of Site Risks

cancer and noncancer risks are within the range considered generally allowable by U.S. EPA. However, because the cancer risk exceeded 10^{-6} , leaching potential was investigated further in the RI.

The potential future release of COPCs in soil to groundwater was evaluated further in the RI through a leaching analysis. This analysis indicated that the 30-year average concentration for TCE is less than the tap water PRG. Based on the results of this analysis, the RI recommended that further action was not necessary to prevent COPCs in soil from migrating to groundwater at MDA-07. Although groundwater at MDA-07 does not require remediation because no site-specific releases occurred, the AOC is located adjacent to a large VOC plume that originates at an OU-1 site, IRP-12. Therefore, groundwater at MDA-07 is being addressed under the remedial action for OU-1.

7.4.8 AOC MMS-01, Major Spill Area

Human-health risks at MMS-01 were evaluated in the RFA through a screening risk assessment based on residential and industrial exposure to soil COPCs. Groundwater sampling was not conducted at MMS-01. Incremental cancer risks and noncancer risks due to COPCs in soil are within the range considered allowable by U.S. EPA (Table 7-3). Therefore, no further action was recommended for soil at this site.

A leaching analysis performed in the RFA identified one COPC (methylene chloride) that had the potential to affect groundwater at a concentration above the tap water PRG. Because the modeled potential future release concentration for methylene chloride exceeded the tap water PRG, a screening risk assessment for this COPC in groundwater was conducted. The results of the screening risk assessment (Table 7-3) indicate that cancer and noncancer risks are within the range considered generally allowable by U.S. EPA. However, because the cancer risk exceeded 10^{-6} , leaching potential was investigated further in the RI.

The potential future release of COPCs in soil to groundwater at MMS-01 was evaluated further in the RI through a leaching analysis. This analysis estimated that the groundwater concentration of methylene chloride in the first WBZ would exceed the PRG for less than 3 years. Because the PRG exceedances are not large, do not persist, and are unlikely to impact zones where water is potentially used for beneficial purposes, the RI recommended that further action was not necessary to prevent COPCs in soil from migrating to groundwater at MMS-01.

7.4.9 MWA-03, Former Wash Pad

Human-health risks at MWA-03 were evaluated in the RFA through a screening risk assessment based on residential (soil and groundwater) and industrial (soil) scenarios. Results indicate that, under the industrial scenario, incremental cancer risks are within the range considered generally allowable by U.S. EPA and noncancer risks are below the threshold level of 1.0 (Table 7-3). However, under the residential scenario, cancer and noncancer risks associated with soil exceeded levels considered generally allowable by

U.S. EPA. Arsenic accounts for the majority of both cancer and noncancer risks reported for the soil media. Based on this risk evaluation, designated areas of soil at MWA-03 were recommended for a RCRA removal action. This action was completed in December 1997, and as shown in the last entry for MWA-03 in Table 7-3, soils at MWA-03 no longer present an unacceptable human-health risk. Based on this RCRA removal action, soils at MWA-03 were recommended for no further action. The results of the screening risk assessment conducted on soil remaining at MWA-03, after the RCRA action, indicate that total excess cancer risks are 4.65×10^{-5} , but incremental cancer risks are 0, and the hazard index for noncancer risks are less than 1 (OHM 2000b).

A fate and transport analysis conducted during the RFA indicates no potential future release of soil COPCs to groundwater at concentrations exceeding tap water PRGs and background levels. Because no COPCs were predicted to leach to the groundwater at concentrations that exceed PRGs and background levels, a screening risk assessment for potential impacts to groundwater was not performed for the RFA.

The RFA risk-screening results for groundwater indicated that both cancer and noncancer groundwater risks exceed U.S. EPA guidelines. Arsenic and chromium are the risk drivers for cancer risks. Arsenic and thallium are the risk drivers for noncancer risks. Based on the results of the RFA screening risk assessment, groundwater at MWA-03 was recommended for further evaluation during the RI.

COPCs in groundwater were evaluated further in the RI through geochemical analysis. The results of the analysis indicate that the concentrations of metals (arsenic, chromium, and thallium) in groundwater are within the range of naturally occurring variation of these metals at MCAF Tustin. This indicates that the presence of these COPCs at MWA-03 did not result from site-related activities. Based on the results of the geochemical analysis, the RI Report recommended no further action for groundwater at MWA-03.

7.5 RI SITE IRP-13E

Human-health risks were evaluated in the RI baseline risk assessment at IRP-13E for four land-use scenarios: residential, industrial (office worker), construction, and recreational (park user) (Table 7-4). Risks were evaluated by exposure to COPCs in soil. The assessment did not address exposures to groundwater. (The off-site laboratory did not analyze groundwater samples because the on-site laboratory did not identify VOCs). Incremental cancer soil risks evaluated under these four scenarios were within the range considered allowable or generally allowable by U.S. EPA. Noncancer risks were below the threshold level of 1.0.

The future land use at IRP-13E is planned to be medium-density residential. The primary receptor is a resident. The excess cancer risk posed by COPCs in soil, based on the residential scenario, is estimated to be 1.3×10^{-5} . The risk drivers are Aroclor 1260 and benzo(b)fluoranthene, which contribute 1.1×10^{-5} and 1.3×10^{-6} , respectively. Because the excess cancer risk is within the generally acceptable risk range, the DON made a risk

Table 7-4
No Action Sites – Summary of Human-Health Risk Results for RI Site IRP-13E

IRP Site	SOIL								SURFACE WATER		GROUNDWATER				BASEWIDE GROUNDWATER STUDY	
	Residential Risk ^a / Risk Drivers		Industrial Risk ^a / Risk Drivers		Construction Risk ^a / Risk Drivers		Recreational Risk ^a / Risk Drivers		Recreational Risk ^a / Risk Drivers		Residential Risk ^a / Risk Drivers		Construction Risk ^a / Risk Drivers		Evaluation Rationale/ Evaluation Results	
	Cancer Risk ^b	HI	Cancer Risk ^b	HI	Cancer Risk ^b	HI	Cancer Risk	HI	Cancer Risk	HI	Cancer Risk	HI	Cancer Risk	HI		
IRP-13E	1.3×10^{-5} Aroclor 1260 Benzo(b)fluoranthene	0.75 None	8.4×10^{-6} Aroclor 1260	0.15 None	5.2×10^{-7} None	0.27 None	4.1×10^{-6} Aroclor 1260	0.41 None	NA	NA	NA	NA	NA	NA	Leaching evaluation indicates that all soil COPCs are below the tap water PRG. Therefore, no further action was recommended for groundwater.	

Notes:
^a risk estimates presented are based on baseline risk assessment calculations
^b the risk drivers presented are those associated with the incremental cancer risk

Acronyms/Abbreviations:
COPC – chemical of potential concern
HI – hazard index
IRP – Installation Restoration Program
NA – not applicable
PRG – preliminary remediation goal
RI – remedial investigation

Section 7 Summary of Site Risks

management decision to recommend no further action for soil at IRP-13E. This decision was based on the following conditions.

- The conservative nature of the baseline risk assessment assumes that a resident will live at the site for 30 years and be exposed to chemicals down to 10 feet bgs for 50 weeks each year.
- The highest measured concentrations of Aroclor 1260 and benzo(b)fluoranthene were used for the EPCs.
- The results of the fate and transport analysis for COPCs in soil indicated that none of the soil COPCs have the potential to impact groundwater in the future at concentrations exceeding tap water PRGs.

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Section 8

DESCRIPTION OF NO ACTION ALTERNATIVE

It has been concluded that IRP-2, IRP-9, and IRP-13E and AOCs AD-04, AS-06, AS-08, AST-02, AST-04, MDA-04, MDA-07, MMS-01, and MWA-03 do not pose an unacceptable risk to human health or the environment based on:

- the RFA, ESI, and RI field investigations;
- HHRA's;
- fate and transport (leaching) analyses;
- geochemical evaluation of groundwater performed as part of the RI; and
- closure reports for IRP-2, IRP-9, and MWA-03.

Accordingly, no remedial action is appropriate for these IRP sites and AOCs.

Each of the IRP sites and AOCs included in the OU-2 ROD was evaluated and was determined to require no further action for soil or groundwater due to site-specific releases. However, IRP-9, AS-08, MDA-04, and MDA-07 are located near large VOC plumes that originate from three OU-1 sites (IRP-3, IRP-12, and IRP-13S). Therefore, groundwater at IRP-9, AS-08, MDA-04, and MDA-07 is being addressed as part of the OU-1 remedial action. The need for groundwater cleanup at IRP-9 and AOCs AS-08, MDA-04, and MDA-07 will be evaluated in conjunction with remedial action at OU-1 and will be documented in a separate ROD/RAP. DTSC, RWQCB, and U.S. EPA agree with this approach. The DON's selection of no action reflects the determination that site-specific releases do not represent a threat to human health or the environment.

No monitoring or deed restrictions are required to address chemicals present in soil and/or groundwater as a result of military operations at the no action IRP sites/AOCs. However, as part of potential remedial actions associated with OU-1, it may be necessary to place use restrictions on one or more of the IRP sites/AOCs. The need for such restrictions will be addressed in the Proposed Plan/draft RAP and ROD/RAP for OU-1. The property containing IRP-9, AS-08, MDA-04, and MDA-07 will not be transferred until the evaluation of OU-1 is complete and institutional controls are finalized for that property. Institutional controls are anticipated and will be developed in conjunction with an Environmental Restriction Covenant and Agreement. When the Environmental Restriction Covenant and Agreement is finalized, it will be executed contemporaneously with the negotiation and execution of the conveyance of the property to the transferee(s) by deed, pursuant to the Defense Base Closure and Realignment Act of 1990, 10 *United States Code* Section 2687 note.

Section 121(d) of CERCLA states that remedial actions at CERCLA sites must, upon completion, meet any federal (or state if more stringent) environmental standards, requirements, criteria, or limitations that are determined to be applicable or relevant and appropriate requirements (ARARs). ARARs do not apply unless remedial action is being taken at a site and are therefore not applicable to the no action sites and AOCs addressed in this ROD/RAP.

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Section 9

DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan/draft RAP for the no action sites and AOCs was released for public comment in January 2000. The Proposed Plan/draft RAP identified no further action as the appropriate response for these sites and AOCs.

The DON has reviewed all written and oral comments submitted during the public comment period. Upon review of these comments, it was determined that no significant changes to the selected remedial action of no further action, as it was originally identified in the Proposed Plan/draft RAP, were necessary or appropriate.

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Section 10

REFERENCES

- Advanced Science, Inc. 1990. Operational Plan Centralized Storage Facility and Storage Bunker, Marine Corps Air Station.
- ANL. *See* Argonne National Laboratory.
- ASI. *See* Advanced Science, Inc.
- Argonne National Laboratory. 1994. Expedited Site Characterization at Marine Corps Air Station Tustin, California: Work Plan for Phase I Field Investigations. September.
- . 1995a. Expedited Site Characterization at Marine Corps Air Station Tustin, California: Draft Phase I Report and Recommendations for Phase II. January.
- . 1995b. Final Report: Phase II Investigations for Expedited Site Characterization at the Marine Corps Air Station Tustin, California. October.
- Bechtel National, Inc. 1996a. Navy CLEAN II MCAS Tustin, Draft Final Expanded Site Inspection Report. CTO-0054/0156. Prepared for Southwest Division Naval Facilities Engineering Command. October. (Considered final per correspondence transmitted to the BCT on 31 March 1997 [BNI 1997c].)
- . 1996b. Draft Remedial Investigation Report for Operable Unit 3, Marine Corps Air Station, Tustin, California. Prepared for Southwest Division Naval Facilities Engineering Command. July.
- . 1996c. Draft Feasibility Report for Operable Unit 3, Marine Corps Air Station, Tustin, California. Prepared for Southwest Division Naval Facilities Engineering Command. July.
- . 1996d. Revised Draft Engineering Evaluation/Cost Analysis for IRP-2 (Oil Disposal Area) and IRP-9 (Hangar No. 1 Line Shacks), Marine Corps Air Station, Tustin, California. Prepared for Southwest Division Naval Facilities Engineering Command. October.
- . 1996e. Draft RCRA Facility Assessment Visual Site Inspection Report for Three Potential AOCs, MCAS Tustin, California. CTO-0074. Prepared for Southwest Division Naval Facilities Engineering Command. January.
- . 1996f. Draft RCRA Facility Assessment Visual Site Inspection Report for Osumi Corporation Yard (AOC OCY-01). CTO-0074. Prepared for Southwest Division Naval Facilities Engineering Command. November.
- . 1996g. Final Updated Community Relations Plan, Marine Corps Air Station, Tustin, California. February.
- . 1996h. Navy CLEAN II MCAS Tustin, Revised Engineering Evaluation/Cost Analysis for IRP-13W. CTO-0049. Prepared for Southwest Division Naval Facilities Engineering Command. October.
- . 1996i. Draft Final Risk Assessment Work Plan, MCAS Tustin, California. CTO-0049/0352. Prepared for Southwest Division Naval Facilities Engineering Command. January.

-
- . 1996j. MCAS Tustin Draft Final Screening Risk Assessment Work Plan for CTO-0054, -0074, and -0085. February.
- . 1997a. Draft Final Remedial Investigation Report for Operable Units 1 and 2. Marine Corps Air Facility Tustin, California. November.
- . 1997b. Navy CLEAN II MCAS Tustin, Draft Final RCRA Facility Assessment Report. CTO-0074/0171. Prepared for Southwest Division Naval Facilities Engineering Command. April.
- . 1997c. Letter from Husam N. Masri, BNI, to Richard Selby, SWDIV, MCAS Tustin. Final Expanded Site Inspection Report, Volumes I and II, dated October 1996. 31 March.
- . 1998. Final PAH Apron Study Report, Marine Corps Air Station, Tustin, California. June.
- . 2000a. Draft Final Environmental Baseline Survey. Marine Corps Air Facility Tustin, California. May.
- . 2000b. Final Site Management Plan, Marine Corps Air Facility Tustin, Tustin, California. CTO-0187/0076. February.
- . 2000c. Final Site Management Plan – 2000 Update, Marine Corps Air Facility Tustin, Tustin, California. CTO-0187/0092. June.
- BNI. *See* Bechtel National, Inc.
- Brown and Caldwell Consulting Engineers. 1985. Initial Assessment Study of Marine Corps Air Station Tustin, California. NEESA 13-075. Prepared for Naval Energy and Environmental Support Activity. September.
- California Regional Water Quality Control Board. 1995. Santa Ana Region. Basin Plan.
- Cal-EPA. *See* California Environmental Protection Agency.
- California Environmental Protection Agency. 1994. California Cancer Potency Factors: Update. Office of Environmental Health Hazard Assessment. November.
- Durham, Mark. 1996. U.S. Army Corps of Engineers. Letter to U.S. Marine Corps, BRAC Environmental Coordinator. 29 January.
- Jacobs Engineering Group, Inc. 1991. Marine Corps Air Station (MCAS) Tustin, Santa Ana, California, RCRA Facility Assessment – Draft Preliminary Report. Prepared for Southwest Division Naval Facilities Engineering Command. August 22.
- . 1992a. MCAS Tustin, Santa Ana, California, Underground Storage Tank Sites Revised Preliminary Review/Draft Visual Site Inspection Report. Prepared in conjunction with IT Corporation for Southwest Division Naval Facilities Engineering Command. March 12.
- . 1992b. MCAS Tustin, Santa Ana, California Aerial Photograph Review. Prepared for Southwest Division Naval Facilities Engineering Command. November 12.

Section 10 References

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- . 1992c. Addendum to Revised PR/Draft VSI Report, MCAS Tustin, Santa Ana, California. Prepared for Southwest Division Naval Facilities Engineering Command. November 30.
- . 1993a. MCAS Tustin, Santa Ana, California, Final Site Inspection Report. Prepared for Southwest Division Naval Facilities Engineering Command. March 12.
- . 1993b. MCAS Tustin, Santa Ana, California, Fuel Farm Area, Final Site Assessment Report. Prepared for Southwest Division Naval Facilities Engineering Command. September 24.
- James M. Montgomery Consulting Engineers, Inc. 1988a. Site Inspection Plan of Action, Installation Restoration Program, Marine Corps Air Stations (MCAS) Tustin and El Toro, Santa Ana, California. Prepared for Western Division Naval Facilities Engineering Command. July.
- . 1988b. MCAS Tustin Fuel Farm Area Remedial Investigation. July.
- JMM. *See* James M. Montgomery Consulting Engineers, Inc.
- Marine Corps Air Station Tustin. 1996. Final Second Addendum to Revised Preliminary Review/Draft Visual Site Inspection Report Facility Assessment at Marine Corps Air Station Tustin, Santa Ana, California. Prepared for Southwest Division Naval Facilities Engineering Command. June.
- Marine Corps Air Station Tustin Base Realignment and Closure Cleanup Team. 1995. Meeting minutes, January 31 and February 1.
- . 1996. Meeting minutes, September 3.
- . 1997. Meeting Minutes Dated July 24.
- MCAS Tustin. *See* Marine Corps Air Station Tustin.
- MCAS Tustin BCT. *See* Marine Corps Air Station Tustin Base Realignment and Closure Cleanup Team.
- OHM. *See* OHM Remediation Services Corp.
- OHM Remediation Services Corporation. 1997. Site Assessment/Closure Report Former Installation Restoration Program (IRP) Site 16B Marine Corps for Air Station Tustin, California. Prepared for Southwest Division Naval Facilities Engineering Command. September.
- . 1998a. Draft Closure Report Soil Removal Actions at Site IRP-2 (Oil Disposal Area), Marine Corps Air Facility Tustin, California. Prepared for Southwest Division Naval Facilities Engineering Command. April.
- . 1998b. Draft No Further Action Report: Closure of Site MWA-03 for Marine Corps Air Facility Tustin, Santa Ana, California. Prepared for Southwest Division Naval Facilities Engineering Command. March.

- . 2000a. Draft Final Closure Report: Soil Removal Action at Sites IRP-9A (Hangar No. 1 Line Shacks, Subareas 1 and 2) and IRP-9B (Apron No. 1 Subareas 1 and 3) MCAF Tustin, California. 18 May.
- . 2000b. Final Memorandum from Marcus Smith, IT PM, to Keith Forman, MCAF Tustin BEC. Screening Risk Assessment for Site MWA-03 at MCAF, Tustin, California. 18 May 2000.
- RWQCB. *See* California Regional Water Quality Control Board.
- SCS. *See* SCS Engineers, Inc.
- SCS Engineers, Inc. 1979. Oil and Hazardous Substance Spill Prevention, Control and Countermeasure Field Survey Report and SPCC Plan, MCAS (H) Tustin.
- Southwest Division Naval Facilities Engineering Command. 1997. Non-Time-Critical Removal Action Memorandum/Removal Action Work Plan for IRP-2 (Oil Disposal Area) and IRP-9 (Hangar Line Shacks), MCAF Tustin. March.
- SWDIV. *See* Southwest Division Naval Facilities Engineering Command.
- The Planning Center. 1998. MCAS Tustin Specific Plan/Reuse Plan, Errata. Prepared for the city of Tustin. September.
- United States Marine Corps. 1999. Final Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) for the Disposal and Reuse of the Marine Corps Air Station (MCAS) Tustin, California. Prepared in conjunction with the City of Tustin. December.
- USDA. *See* U.S. Department of Agriculture.
- U.S. Department of Agriculture. 1992. Natural Resource Management Plan: Marine Corps Air Station Tustin, California. Soil Conservation Service, Davis, California. January.
- U.S. Environmental Protection Agency. 1989. Risk Assessment Guidance for Superfund, Volume I, Part A: Human Health Evaluation Manual, Interim Final. EPA 540/1-89/002. Office of Emergency and Remedial Response, Washington, D.C. December.
- . 1990. Interim Final Guidance for Data Usability in Risk Assessment. EPA 540/G-90/008. Office of Emergency and Remedial Response, Washington, D.C.
- U.S. EPA. *See* U.S. Environmental Protection Agency.
- USMC. *See* United States Marine Corps.

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY
MARINE CORPS AIR FACILITY - TUSTIN, California
PROPOSED PLAN, OPERABLE UNIT 2, NO ACTION SITES AND AREAS OF CONCERN

Letters Received During Public Comment Period

Comments by: *Dana Ogden, Senior Project Manager, City of Tustin, in a letter dated January 28, 2000*

Number	Comments	Response
1	<p>IRP-2- The document indicates that a pistol range had previously existed at the site yet there is no definitive indication that the site has ever been cleared of "unexploded ordnance."</p>	<p>Installation Restoration Program (IRP) Site 2 is a former oil disposal site that operated from 1970 to 1981. The site was adjacent to a former pistol range identified in the 1992 visual site inspection. The pistol range was addressed as area of concern (AOC) MRR-1 under the RCRA program. No further action (NFA) concurrence from the BCT was received for MRR-1 in January 1998.</p> <p>Available information on the former pistol range indicates that only small caliber ammunition (.45 caliber or less) was used at the range. The area containing the former pistol range was addressed in the IRP-2 site inspection (SI), conducted in 1991 by Jacobs Engineering Group, Inc. (JEG 1993), and the expanded site inspection (ESI) conducted in 1995 by Bechtel National, Inc. (BNI 1996). No evidence of unexploded ordnance, live or spent ammunition, or other pistol range debris was reported during drilling and sampling activities at the site.</p> <p>At the time of the investigations, residential housing facilities occupied the area, and there was no visual evidence of the former pistol range. Two shallow (1-ft. depth) soil samples and one groundwater sample were collected during the SI and were analyzed for volatile organic compounds (VOCs), total petroleum hydrocarbons, semivolatile organic compounds, polychlorinated biphenyls, pesticides, and metals. During the ESI, one groundwater hydropunch sample, and soil samples from five shallow (5-ft. depth) soil borings and one 30-ft. soil boring, were collected in the pistol range area and analyzed for VOCs, polynuclear aromatic hydrocarbons (PAHs), and metals. Based on the results of a residential-use scenario risk assessment of the analytical data available for IRP-2 and the former pistol range, the primary risk drivers at IRP-2 were identified as PAHs and arsenic (BNI 1996). The ESI report recommended NFA for soil at IRP-2, including soil at MRR-1, subsequent to a soil removal action at IRP-2. PAH-contaminated soil removal and site restoration activities at IRP-2 were completed in 1997.</p>

(table continues)

Responsiveness Summary (continued)

Number	Comments	Response
		<p>Based on an ESI recommendation, metals in groundwater at IRP-2 and MRR-1 were evaluated in a basewide groundwater fate and transport analysis (BNI 1997). It was determined that the dissolved metals reported at the site were within the range of natural variations of these constituents, and NFA was recommended for groundwater at IRP-2 and MRR-1.</p>
2	<p>IRP-2- The site is currently developed with residential structures that were constructed in 1979. Residential construction during this period of time typically utilized paints containing lead, yet there is no definitive statement that lead-based paint contamination has been examined and eliminated.</p>	<p>Please refer to Response 1 for a description of IRP-2. Lead-based paint (LBP) was not considered a release at IRP-2. As such, LBP will not be addressed in the MCAF Tustin decision documents (Proposed Plans or RODs), and there will be no definitive statement that LBP contamination has been examined and eliminated. However, full disclosure of LBP information will be provided to base property lessees or transferees.</p> <p>Although the Residential Lead-Based Paint Hazard Reduction Act of 1992, PL 102-550, Title X, does not require inspection of residential real property constructed after 1 January 1978, the following LBP information is available for the housing constructed in the vicinity of IRP-2. LBP surveys were conducted at several MCAF Tustin housing units built after 1978 during preparation of a LBP Management Plan in 1994. Included in the inspection were units in the Irvine Park North Housing Community, located in Parcel 34. These units were constructed in 1979 and 1982 and some are located within the boundaries of IRP-2.</p> <p>Sixty-five randomly selected housing units in Irvine Park North were inspected for LBP. Dust and soil samples from 13 units were also collected for lead analysis. According to the inspection reports (Navy Public Works Center 1995), the results indicate the following.</p> <ul style="list-style-type: none"> • Lead-based paint does not exist on the surfaces of the tested components. • Overall surface paint conditions are classified as 100% intact. • A lead-in-soil hazard does not exist. Bulk soil samples tested by laboratory analysis were either negative or well below the interim hazard standards (U.S. EPA 1999) of 400 parts per million.

(table continues)

Responsiveness Summary (continued)

Number	Comments	Response
		<ul style="list-style-type: none"> A lead-in-dust hazard does not exist. Dust samples tested by laboratory analysis were either negative or well below the interim hazard standards (U.S. EPA 1999) of 40 micrograms per square foot (ug/ft²) for floors and 250 ug/ft² for interior window sills.
		<p>References:</p> <p>JEG 1993: Final Site Inspection Report, Marine Corps Air Station (MCAS) Tustin, California. March.</p> <p>BNI 1996: Draft Final Expanded Site Inspection Report, Marine Corps Air Station, Tustin, California. October.</p> <p>BNI 1997: Draft Final Remedial Investigation Report for Operable Units 1 and 2, Marine Corps Air Station, Tustin, California. November.</p> <p>U.S. EPA 1999: Lead-Based Paint Guidelines for Disposal of Department of Defense Residential Real Property- A Field Guide. Interim Final, December.</p>

ATTACHMENTS

Attachment A

**ADMINISTRATIVE RECORD
SPECIAL COLLECTION INDEX
FOR NO ACTION SITES**

SPECIAL COLLECTION INDEX

OPERABLE UNIT 2

TECHNICAL DOCUMENTS

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)
 MCAS Tustin
 SITE SPECIFIC INDEX FOR OPERABLE UNIT 2

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000870		06-11-1996	USDA		09-01-1978								SOIL SURVEY OF ORANGE COUNTY AND WESTERN PART OF RIVERSIDE COUNTY	ADMIN RECORD	SOIL SURVEY TECHNICAL DOC.	00001 00003 00005 00007 00012 00013 00016 OU 2	SOUTHWEST DIVISION
RPT		NONE															
NONE		00.0															
0300																	
M62535 / 000057		06-06-1994			09-26-1984								GROUNDWATER MANAGEMENT, IRVINE AREA, ORANGE COUNTY CALIFORNIA - FOR OC WATER DISTRICT BY HARVEY O. BANKS,CONSUTLING ENGINEER	ADMIN RECORD	EL TORO GROUNDWATER	00001 00003 00005 00007 00012 00013 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
RPT		NONE															
NONE		01.1															
0125																	
M62535 / 000328		11-02-1994	BROWN & CALDWELL		06-01-1985								DRAFT INITIAL ASSESSMENT STUDY MCAS (HELICOPTER) TUSTIN (NEESA 13-075), NAVAL ENERGY & ENVIRONMENTAL SUPPORT ACTIVITY, PT. HUENEME	ADMIN RECORD	ASSESSMENT ST TECHNICAL DOC.	00001 00002 00003 00005 00007 00008 00012 00013 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
RPT		NONE															
N62474-84-C3378		01.1	NEESA														
0350																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000121		10-06-1994	BROWN AND CALDWELL		09-01-1985				INITIAL ASSESSMENT STUDY OF MCAS, TUSTIN NEESA 13-075	ADMIN RECORD	IAS	00001	SOUTHWEST DIVISION				
RPT		NONE	E. B. LUECKER									00002					
NONE		01.3	NEESA PORT HUENEME									00004					
0112												00005					
												00006					
												00007					
												00008					
												00009					
												00010					
												00011					
												00012					
												00013					
												00014					
												00015					
												OU 1					
												OU 2					
												OU 3					
M62535 / 000091		10-06-1994	DHS LOS ANGELES		09-18-1986				DOHS COMMENTS ON INITIAL ASSESSMENT STUDY OF SEPTEMBER 1985	ADMIN RECORD	ASSESSMENT ST COMMENTS	00007	SOUTHWEST DIVISION				
LTR		NONE	S. W. SIMPSON									00008					
NONE		01.1	MCAS TUSTIN									00009					
0002			J. B. LEAP									00010					
												00011					
												00012					
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												00014					
												OU 1					
												OU 2					
												OU 3					

UIC No. / Rec. No.

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Author Affil.

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Contr./Guid. No.

CTO No.

Recipient Affil.

Approx. # Pages

EPA Cat. #

Recipient

- - - - - Subject

- - - - - Classification

Keywords

Sites

Location
Box No.

M62535 / 000409

01-12-1995

1991 CLOSURE INFORMATION; NOTES
MEMOS FAX

ADMIN RECORD

IAS
SITE INVESTIGAT

00003

SOUTHWEST
DIVISION

00005

00007

00008

00009

00012

00013

00015

OU 1

OU 2

MISC

NONE

NONE

01.1

0100

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000125		10-06-1994	U.S. NAVY										ADDENDUM TO THE PRELIMINARY	ADMIN RECORD	IAS	00001	SOUTHWEST DIVISION
		03-15-1991	J. R. FAUNCE										ASSESSMENT (IAS) NEESA 13-075A STUDY		MOFFETT TRENC	00002	
RPT		NONE	US EPA SAN										CONCLUDED RECOMMENDATIONS FOR		PRELIM. ASSESS.	00003	
NONE		01.3	FRANCISCO										SEVERAL SITES UNDER IRP SIGNED		TECHNICAL DOC.	00004	
0058			A. STRAUSS										FEBRUARY 22, 1991			00005	
																00006	
																00007	
																00008	
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UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000481		05-30-1995											INSTALLATION RESTORATION PROGRAM, HISTORY, CURRENT STATUS, ANTICIPATED SCHEDULE, BUDGET	NON-ADMIN RECORD	HISTORIC IRP SITE INVESTIGAT	00002 00003 00005 00007 00008 00009 00012 00013 00015 OU 1 OU 2	SOUTHWEST DIVISION
MISC		NONE															
NONE		00.0															
0003																	
M62535 / 001034		07-18-1996											STAFF REPORT - UPDATE ON ENVIRONMENTAL RESTORATION ACTIVITIES AT MCAS EL TORO	ADMIN RECORD	IRP	00001 00018 OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION
RPT		09-02-1992															
NONE		NONE															
0005		01.0															
M62535 / 000263		10-06-1994											FINAL FACT SHEET: BASE HISTORY & DESCRIPTION; IRP'S OPERABLE UNITS; COMMUNITY RELATIONS PROGRAM; HOW IRP WORKS; WHERE YOU CAN GET MORE INFORMATION	ADMIN RECORD	COMM REL FACT SHEET MOFF. PUB PART OPERABLE UNIT PUBLIC PART.	00001 00002 00003 00004 00005 00006 00007 00008 00009 00010 00012 0013W OU 1 OU 2 OU 3	SOUTHWEST DIVISION
FACT		02-17-1993															
N68711-89-D9696		00244															
0006		10.6															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000511		06-12-1995	JACOBS										DRAFT REVISED COMMUNITY RELATIONS PLAN	ADMIN RECORD	CRP	00001	SOUTHWEST DIVISION
		03-30-1993	ROBIN SMITH													00002	
CRP		00244	SWDIV													00003	
N68711-89-D9296		10.2														00004	
0030																00005	
																00006	
																00007	
																00008	
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																00016	
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																OU 2	
																OU 3	
M62535 / 000020		04-07-1994	SWDIV/JACOBS										MANAGEMENT ACTION PLAN DRAFT (CLEAN I) STATUS SUMMARY OF RESTORATION AND COMPLIANCE PROGRAM	ADMIN RECORD	TECHNICAL DOC.	00001	SOUTHWEST DIVISION
		09-27-1993														00002	
MISC		00244														00003	
NONE		01.1														00004	
0200																00005	
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UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000413		02-27-1995	COTTON/BELAND		10-01-1993					EIS/EIR ENVIRONMENTAL SETTING REPORT SPECIFIC PLAN ANDBASE DISPOSAL/REUSE PLAN (SUPERSEDED BY M62535-000061)	ADMIN RECORD	DISPOSAL EIR EIS REUSE	OU 1 OU 2 OU 3	SOUTHWEST DIVISION
RPT NONE 0150		NONE 01.1	MCAS TUSTIN											
M62535 / 000948		06-28-1996	SOUTHWEST DIVISION		02-07-1994					MEETING MINUTES FROM JANUARY 25, 1995 TECHNICAL REVIEWCOMMITTEE TRANSITION MEETING, INCLUDES LIST OF MEETING ATTENDEES	ADMIN RECORD	MOFF. PUB PART MTG MINS PUBLIC PART. TRC	00001 00002 00003 00004 00005 00006 00007 00008 00009 00010 00011 00012 00013 00014 00015 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
MEMO NONE 0008		NONE 10.0	D. CHANDLER VARIOUS AGENCIES											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000949		06-28-1996	MCAS TUSTIN		02-09-1994								PUBLIC NOTICE ANNOUNCING FEBRUARY 24, 1994 PUBLIC MEETING SCHEDULED FOR FORMATION OF RESTORATION ADVISORY BOARD AND SOLICITATION OF RAB MEMBERS	ADMIN RECORD	MEDIA	00001	SOUTHWEST DIVISION
MISC		NONE	PUBLIC												MOFF. PUB PART	00002	
NONE		10.3													PUBLIC NOTICE	00003	
0001															PUBLIC PART.	00004	
															RAB	00005	
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																OU 2	
																OU 3	
M62535 / 000081		06-11-1996	SOUTHWEST DIVISION		03-01-1994								BRAC CLEANUP PLAN FOR 1993, DATED MARCH 1994	ADMIN RECORD	BCP	00005	SOUTHWEST DIVISION
BCP		NONE													MOFFETT TRENC	00006	
NONE		03.3	VARIOUS AGENCIES												TECHNICAL DOC.	00007	
0200																00008	
																00009	
																00011	
																00012	
																00015	
																00016	
																0013W	
																OU 1	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000056	06-06-1994	SOUTHWEST DIVISION	FINAL - ENVIRONMENTAL BASELINE SURVEY (EBS) FOR CERFA REPORT	ADMIN RECORD	CERFA	00001	SOUTHWEST DIVISION										
CLE-I01-01F246-S1-0004	04-14-1994	D. CHANDLER			EBS	00002											
RPT	00246	VARIOUS AGENCIES			MOFFETT TRENC	00003											
N68711-89-D9296	01.4				TECHNICAL DOC.	00004											
0750						00005											
						00006											
						00007											
						00008											
						00009											
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						00014											
						00015											
						00016											
						0007N											
						0013W											
						OU 1											
						OU 2											
						OU 3											
M62535 / 001548	02-05-1998	LEIGHTON AND ASSOC.	DRAFT HISTORIC BLIMP HANGARS ANALYSIS	ADMIN RECORD	HAZMAT	BLDG. 28	SOUTHWEST DIVISION										
	05-01-1994				HISTORIC	BLDG. 29											
RPT	NONE	MCAS TUSTIN				HANGAR 1											
NONE	01.4					HANGAR 2											
0080						OU 1											
						OU 2											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000418		02-27-1995	ANL										DRAFT REPORT: GEOLOGY, HYDROGEOLOGY AND SITE HISTORY	ADMIN RECORD	GEO	00001	SOUTHWEST DIVISION
		08-01-1994													HISTORIC	00002	
RPT		NONE	BECHTEL												TECHNICAL DOC.	00003	
W-31-109-ENG-38		01.1	NATIONAL													00004	
1254																00005	
																00006	
																00007	
																00008	
																00009	
																00010	
																00011	
																00012	
																00013	
																00014	
																00015	
																OU 1	
																OU 2	
																OU 3	
M62535 / 000604		08-22-1995	JACOBS										***** MARINE CORPS AIR STATION YUMA, ARIZONA, OPERABLE UNIT 2 FIELD SAMPLING PLAN DRAFT FINAL	NON-ADMIN RECORD	CERCLA	OU 2	SOUTHWEST DIVISION
		09-01-1994	N. ACEDERA												DQOP		
SAPL		00210	SWDIV												FSP		
N68711-89-D9296		01.1													RCRA		
0075															UST		
M62535 / 000772		04-02-1996	BECHTEL										MEETING MINUTES: MCAS TUSTIN PROJECT REVIEW MEETING, REMEDIAL INVESTIGATION OCTOBER 14, 1994	ADMIN RECORD	MTG MINS	00003	SOUTHWEST DIVISION
CTO-0049/0109		10-24-1994	NATIONAL												REMEDIAL INVES	00005	
MM		00049	W. MYERS												TECHNICAL DOC.	00007	
N68711-92-D-4670		01.1	VARIOUS AGENCIES													00016	
0003			VARIOUS AGENCIES													OU 1	
																OU 2	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001192		01-13-1997	SOUTHWEST DIVISION		01-24-1995	J. PAYNE			US EPA SAN FRANCISCO	NAVY RESPONSE TO AGENCY COMMENTS ON THE TECHNICAL MEMORANDUM PREPARED IN SUPPORT OF THE REMEDIAL INVESTIGATION	ADMIN RECORD	COMMENTS MOFFETT TRENC REMEDIAL INVES TECHNICAL DOC.	00001 00003 00005 00007 00012 00016 OU 2 OU 3	SOUTHWEST DIVISION
LTR NONE 0021		NONE 10.1				D. HODGES								
M62535 / 001782		04-17-2000	BECHTEL NATIONAL INC.		02-01-1995				NAVAC - SOUTHWEST DIVISION	MEETING MINUTES - BRAC CLEANUP TEAM/PROJECT	ADMIN RECORD	AOC ASBESTOS BCP BRAC COMMENTS FFSRA FOSL FOST GW MTG MINS UST	1 10 11 12 13 14 15 16 2 3 4 5 6 7 9 OU 2	SOUTHWEST DIVISION
CTO-0039/0077 MM N68711-92-D-4670 0004		00039												
M62535 / 000895		06-17-1996	SWDIV		02-23-1995	L. HORNECKER			SWDIV	SWDIV (INTERNAL) COMMENTS ON DRAFT CLEAN II DATA MANAGEMENT PLAN DOC. CNTRL. # CTO-0049/0063	NON-ADMIN RECORD	COMMENTS DATA DMP	OU 2	SOUTHWEST DIVISION
COMM N68711-92-D4670 0006		00049 01.1				J. ROGERS								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000985	07-08-1996	BECHTEL	MINUTES OF MCAS TUSTIN BCT/PROJECT	ADMIN RECORD	AST	00001	SOUTHWEST										
	02-24-1995	NATIONAL	REVIEW MEETING FOR BCP COMMENT		BCP	00003	DIVISION										
MM	00039	S. REACKHOF	RESOLUTION		UST	00005											
N68711-92-D4670	01.1	SWDIV				00007											
0004		P. KENNEDY?				00012											
						00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000579	07-18-1995	BECHTEL	DRAFT REMEDIAL INVESTIGATION WORK	ADMIN RECORD	MOFFETT TRENC	00003	SOUTHWEST										
CTO-0049/0072	03-01-1995	NATIONAL	PLAN FOR OPERABLE UNIT 1 AND		REMEDIAL INVES	00005	DIVISION										
WKPL	00049	W. MYERS	OPERABLE UNIT 2 MARINE CORPS AIR		TECHNICAL DOC.	00007											
N68711-92-D-4670	01.1	SOUTHWEST	STATION TUSTIN (INCLUDES DRAFT		WORKPLANS	00012											
0500		DIVISION	BACKGROUND SOILS & GROUNDWATER			00013											
			WORK PLAN), VOLUME 1, VOLUME 2 =			00016											
			DOCUMENT #000580			OU 1											
						OU 2											
						OU 3											
M62535 / 000580	07-18-1995	BECHTEL	DRAFT REMEDIAL INVESTIGATION WORK	ADMIN RECORD	MOFFETT TRENC	00003	SOUTHWEST										
CTO-0049/0072	03-01-1995	NATIONAL	PLAN FOR OPERABLE UNITS 1 AND 2		REMEDIAL INVES	00005	DIVISION										
WKPL	00049	W. MYERS	(INCLUDES DRAFT BACKGROUND SOILS &		TECHNICAL DOC.	00007											
N68711-92-D-4670	01.1	SOUTHWEST	GROUNDWATER WORK PLAN), VOLUME 2,		WORKPLANS	00012											
0500		DIVISION	VOLUME 1 = DOCUMENT #000579			00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000904	06-17-1996	BECHTEL	BECHTEL'S COMMENTS ON ANL REPORT	NON-ADMIN	ANL	OU 1	SOUTHWEST										
	03-02-1995	NATIONAL	EXPEDITED SITE CHARACTERIZATION	RECORD	COMMENTS	OU 2	DIVISION										
COMM	00049	H. MASRI	DRAFT PHASE I & RECOMMENDATIONS														
N68711-92-D4670	01.1	SWDIV	FOR PHASE II/DOC. CNTRL. # CTO-														
0002		J. PAYNE	0049/0067														

UIC No. / Rec. No.

Doc. Control No.

Prc. Date

Author Affil.

Record Type

Record Date

Author

Contr./Guid. No.

CTO No.

Recipient Affil.

Approx. # Pages

EPA Cat. #

Recipient

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Classification

Keywords

Sites

Location
Box No.

M62535 / 000780
CTO-0049/0086
WKPL
N68711-92-D-4670
0100

04-03-1996
03-29-1995
00049
01.1

BECHTEL
NATIONAL
W. MYERS
SWDIV
J. PAYNE

DRAFT RISK ASSESSMENT WORK PLAN
CONCLUDING PART I: HUMAN RISK
ASSESSMENT; PART II: INCLUDING
ECOLOGICAL ASSESSMENT

ADMIN RECORD

HA
MOFFETT TRENC
MTG MINS
RA
TECHNICAL DOC.

00002
00003
00005
00007
00012
00013
00016
0007N
0007S
0013E
0013W
OU 1
OU 2
OU 3

SOUTHWEST
DIVISION

M62535 / 000348

LTR
NONE
0001

06-25-1996
04-17-1995
NONE
01.1

SOUTHWEST
DIVISION
J. PAYNE
VARIOUS
AGENCIES

TRANSMITTAL VOLS 1 & 2 OF DRAFT
REMEDIAL INVESTIGATION WORK PLAN,
IDW, HEALTH & SAFETY, RISK
ASSESSMENT, DQOS FOR OU1 & OU2,
FIELD SAMPLING PLAN

ADMIN RECORD

H&SP
IDW
RA
REMEDIAL INVES
WORKPLANS

00001
00003
00005
00007
00012
00013
00016
OU 1
OU 2
OU 3

SOUTHWEST
DIVISION

M62535 / 000757

COMM
N68711-92-D4670
0002

04-02-1996
04-19-1995
00049
01.1

DTSC
B. SIMMONS
DTSC LONG
BEACH
M. IBRAHIM

COMMENTS FROM BART SIMMONS, PH.D
ON DRAFT QAPP, CTO-049 (DOCUMENT
CONTROL #049/210)

ADMIN RECORD

COMMENTS
QAPP
TECHNICAL DOC.

OU 1
OU 2

SOUTHWEST
DIVISION

M62535 / 001585

LTR
NONE
0002

02-26-1998
04-19-1995
00049
10.1

HAZARDOUS
MAT. LAB
B. SIMMONS
DTSC LONG
BEACH
M. IBRAHIM

DTSC REVIEW OF THE DRAFT QUALITY
ASSURANCE PROJECT PLAN

ADMIN RECORD

QAPP

OU 1
OU 2

SOUTHWEST
DIVISION

Wednesday, June 28, 2000

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

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M62535 / 000619		08-22-1995	US EPA SAN FRANCISCO		05-25-1995	D. HODGES			SOUTHWEST DIVISION			J. PAYNE	USEPA COMMENTS ON DRAFT FIELD SAMPLING PLAN, DRAFT REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 1 AND OPERABLE UNIT 2	ADMIN RECORD	COMMENTS FSP MOFFETT TRENC OPERABLE UNIT REMEDIAL INVES SAMPLING TECHNICAL DOC. USEPA WORKPLANS	00013 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
COMM		00049															
NONE		01.1															
0006																	
M62535 / 000815		05-17-1996	SOUTHWEST DIVISION		05-31-1995	D. CHANDLER			RAB MEMBERS			PUBLIC	MINUTES & OTHER MATERIAL FROM MAY 31, 1995 RAB MEETING(ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT # 000682)	ADMIN RECORD	COMM REL MOFF. PUB PART MTG MINS PUBLIC PART. RAB	00001 00003 00005 00007 00012 00013 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
MM		00063															
N68711-92-D4670		01.1															
0015																	
M62535 / 000612		08-22-1995	US EPA SAN FRANCISCO		06-20-1995	D. HODGES			SWDIV			L. NUZUM	COMMENTS ON DRAFT MOBILE LABORATORY QUALITY ASSURANCE PROJECT PLAN MCAS TUSTIN	ADMIN RECORD	COMMENTS MOFFETT TRENC QAPP TECHNICAL DOC.	00001 00003 00005 00007 00012 00013 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
COMM		NONE															
NONE		01.1															
0004																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000045		05-10-1994	DTSC										DTSC COMMENTS ON DRAFT MOBIL LAB QAPP	ADMIN RECORD	COMMENTS	00012	SOUTHWEST DIVISION
		06-29-1995	B. SIMMONS												MOFFETT TRENC	00013	
COMM		NONE	DTSC												QAPP	00016	
N68711-92-D4670		01.1	H. IBRAHIM												TECHNICAL DOC.	OU 1	
																OU 2	
																OU 3	
M62535 / 000101		10-06-1994	USEPA										USEPA COMMENTS ON DRAFT RISK ASSESSMENT WORK PLAN PART I - HUMAN HEALTH RISK ASSESSMENT	ADMIN RECORD	COMMENTS	00001	SOUTHWEST DIVISION
		06-30-1995	J. PAYNE												MOFFETT TRENC	00005	
COMM		00049	USEPA												RISK	00007	
N68711-92-D4670		01.1	D. HODGES												TECHNICAL DOC.	00012	
																WORKPLANS	00013
																	00016
																OU 1	
																OU 2	
																OU 3	
M62535 / 000891		06-17-1996	US EPA SAN FRANCISCO										USEPA COMMENTS ON DRAFT CLEAN II DATA MANAGEMENT PLAN,MCAS TUSTIN	ADMIN RECORD	COMMENTS	00001	SOUTHWEST DIVISION
		06-30-1995	D. HODGES												DATA	00003	
COMM		00049	SOUTHWEST DIVISION												DMP	00007	
N68711-92-D4670		01.1	J. PAYNE												MOFFETT TRENC	00012	
																TECHNICAL DOC.	00013
																USEPA	00016
																OU 1	
																OU 2	
																OU 3	
M62535 / 000637		08-30-1995	BECHTEL NATIONAL										DRAFT FINAL SAMPLING AND ANALYSIS PLAN - REFERENCE DOCUMENTS 858, 859, 860; INCLUDES REPLACEMENT PAGES FOR SECTIONS 1, 2, & 3; TABLE OF CONTENTS; & APPENDIX D, DATED 9/5/95, REPLACEMENT PAGES FOR SECTIONS 1, 2, & 4, DATED 8/16/95	ADMIN RECORD	SAMPLING	00001	SOUTHWEST DIVISION
CTO-0049/0166		07-05-1995	W. MYERS												SAP	00003	
SAPL		00049	SOUTHWEST DIVISION												TECHNICAL DOC.	00005	
N68711-92-D-4670		01.1															
																	00007
																	00012
																	00016
																OU 1	
																OU 2	
																OU 3	

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M62535 / 000884	06-11-1996	BECHTEL	DRAFT FINAL INVESTIGATION-DERIVED	ADMIN RECORD	IDWMP	00001	SOUTHWEST										
CTO-0049/0165	07-05-1995	NATIONAL	WASTE MANAGEMENT PLAN MCAS TUSTIN		TECHNICAL DOC.	00003	DIVISION										
PLAN	00049	W. MYERS	NAVY CLEAN II			00005											
N68711-92-D4670	01.1	SOUTHWEST				00007											
0100		DIVISION				00012											
						00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000874	06-11-1996	BECHTEL	BACKGROUND SOILS ISSUE PAPER	ADMIN RECORD	SOIL	00001	SOUTHWEST										
CTO-0049/0169	07-15-1995	NATIONAL			TECHNICAL DOC.	00003	DIVISION										
ISPA	00049	W. MYERS				00005											
N68711-92-D-4670	01.1	SWDIV				00007											
0060						00012											
						00013											
						00016											
						OU 2											
						OU 3											
M62535 / 000905	06-17-1996	BECHTEL	RESP TO COMMENTS ON DRAFT	ADMIN RECORD	ANL	00001	SOUTHWEST										
CTO-0049/0161	07-18-1995	NATIONAL	REMEDIAL INVESTIGATION WK PL, FIELD		COMMENTS	00003	DIVISION										
RESP	00049	H. MASRI	SAMPLNG PLAN AND COMMENTS ON		ESC	00005											
N68711-92-D4670	01.1	SOUTHWEST	EXPEDITED SITE CHARACTERIZATION		FSP	00007											
0030		DIVISION	PHASE I REPORT		REMEDIAL INVES	00012											
		J. PAYNE			RESPACT	00013											
					TECHNICAL DOC.	00016											
					WORKPLANS	OU 1											
						OU 2											
						OU 3											

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M62535 / 000635		01-01-2001	BECHTEL		08-01-1995	NATIONAL							DRAFT UPDATED COMMUNITY RELATIONS PLAN	ADMIN RECORD INFO REPOSITORY	ARAR BRAC CRP DERA EE/CA MEK NPL PA PR RAB RCRA RFA RFI ROD SARA SI SWMU UST VSI	1 OU 2	SOUTHWEST DIVISION
PLAN		00063															
N68711-92-D-4670		10.2															
0100																	
M62535 / 000819		05-17-1996	SOUTHWEST		08-01-1995	DIVISION							ANNOUNCEMENT OF NO 8-95 GENERAL MTG; ANNOUNCEMENT OF RI/FS SUBCOMMITTEE MEETING AUGUST 22, 1995 (ALSO AVAILABLE IN RAB ARCHIVES BINDER DOC# 000682)	ADMIN RECORD	COMM REL FEASIBILITY STU. MOFF. PUB PART PUBLIC PART. RAB REMEDIAL INVES	00001 00003 00005 00007 00012 00013 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
MISC		00063															
N68711-92-D4670		01.1	VARIOUS														
0001			RAB MEMBERS PUBLIC														

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M62535 / 000894	06-17-1996	BECHTEL	DRAFT FINAL DATA MANAGEMENT PLAN	ADMIN RECORD	COMMENTS	00001	SOUTHWEST										
CTO-0049/0190	08-02-1995	NATIONAL	AND DRAFT RESPONSES TO COMMENTS		DMP	00003	DIVISION										
MISC	00049	A. MASVIDAL				00005											
N68711-92-D-4670	01.1	SWDIV				00007											
0040						00012											
						00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000646	09-06-1995	BECHTEL	DRAFT FINAL REMEDIAL INVESTIGATION	ADMIN RECORD	OPERABLE UNIT	00001	SOUTHWEST										
CTO-0049/0190	08-08-1995	NATIONAL	WORK PLAN FOR OU 1 & OU 2, (VOL. I,		REMEDIAL INVES	00003	DIVISION										
WKPL	00049	W. MYERS	SECTS 1-8; APPX A; VOL II - APPX B-F)		TECHNICAL DOC.	00005											
N68711-92-D-4670	01.1	SWDIV	(CONSIDERED FINAL PER LETTER DATED		WORKPLANS	00007											
0500			1/5/98 - AR # 1596)			00012											
						00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000784	04-03-1996	BECHTEL	MINUTES FROM AUGUST 3, 1995 MEETING	ADMIN RECORD	MAP	00001	SOUTHWEST										
	08-15-1995	NATIONAL	HELD TO DISCUSS FIELD PROGRESS AT		MOFFETT TRENC	00003	DIVISION										
MM	00049	W. MYERS	SITES 1, 3, 5, 7, 12, 13, 16 AND PROPOSALS		MTG MINS	00005											
N6871192D467000	01.1	VARIOUS	FOR ADDITIONAL FIELD WORK		TECHNICAL DOC.	00012											
0050		AGENCIES				00013											
						00016											
						0007N											
						0007S											
						0013W											
						OU 1											
						OU 2											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000907	06-17-1996	DTSC	DTSC COMMENTS ON WORK PLAN FOR	ADMIN RECORD	COMMENTS	00001	SOUTHWEST										
	08-25-1995	J. CHRISTOPHER	HUMAN HEALTH RISK ASSESSMENT		HA	00003	DIVISION										
COMM	00049	DTSC			MOFFETT TRENC	00007											
N68711-92-D4670	01.1	M. IBRAHIM			RA	00012											
0005					TECHNICAL DOC.	00013											
					WORKPLANS	00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000859	06-10-1996	USMC	DRAFT RESPONSE TO EPA COMMENTS ON	ADMIN RECORD	COMMENTS	00001	SOUTHWEST										
	08-31-1995		DRAFT MOBILE LAB QAPP; REFERENCE		QAPP	00003	DIVISION										
RESP	00049	VARIOUS	DOCUMENTS 637, 858, 860 DOCUMENT		TECHNICAL DOC.	00005											
N68711-92-D4670	01.1	HODGES,	CONTROL # CTO-0049/0213		USEPA	00007											
0005		GARELICK				00012											
						00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000906	06-17-1996	DTSC	COMMENTS ON WORK PLAN FOR	ADMIN RECORD	COMMENTS	00001	SOUTHWEST										
	08-31-1995	J. CHRISTOPHER	ECOLOGICAL RISK ASSESSMENT		MOFFETT TRENC	OU 1	DIVISION										
COMM	00049	DTSC			RA	OU 2											
N68711-92-D4670	01.1	M. IBRAHIM			TECHNICAL DOC.	OU 3											
0007					WORKPLANS												
M62535 / 000873	06-11-1996	US EPA SAN	USEPA REGION IX PRELIMINARY	ADMIN RECORD	MOFF. GUID	00001	SOUTHWEST										
	09-01-1995	FRANCISCO	REMEDATION GOALS (PRGS) SECOND		PRG	00003	DIVISION										
GUID	NONE	S. SMUCKER	HALF 1995		TECH/GUID/DOC.	00005											
NONE	01.1	VARIOUS			USEPA	00007											
0040		AGENCIES				00012											
						00013											
						00016											
						OU 1											
						OU 2											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000858	06-10-1996	BECHTEL	APPENDIX B.1, MOBIL LAB QAPP -	ADMIN RECORD	FSP	00001	SOUTHWEST										
CTO-0049/0213	09-06-1995	NATIONAL	APPENDIX TO DRAFT FINAL FIELD		QAPP	00003	DIVISION										
QAPP	00049	W. MYERS	SAMPLING PLAN; REFERENCE DOCUMENT		TECHNICAL DOC.	00005											
N68711-92-D-4670	01.1	SOUTHWEST	637, 859, 860			00007											
0050		DIVISION				00012											
		J. PAYNE				00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000374	06-25-1996	MCAS TUSTIN	USEPA COMMENTS ON OFFSITE	ADMIN RECORD	COMMENTS	00001	SOUTHWEST										
	09-08-1995	D. HODGES	SAMPLING FOR BACKGROUND PAHS,		FSP	00003	DIVISION										
COMM	00049	USEPA	SECTION 2.11 OF DRAFT FINAL FIELD		TECHNICAL DOC.	00005											
N8711-92-D46700	01.1	J. PAYNE	SAMPLING PLAN		USEPA	00007											
0002						00012											
						00013											
						00016											
						OU 2											
						OU 3											
M62535 / 000375	06-25-1996	USEPA	USEPA COMMENTS ON BACKGROUND	ADMIN RECORD	COMMENTS	00001	SOUTHWEST										
	09-08-1995	D. HODGES	SOILS ISSUE PAPER		TECHNICAL DOC.	00003	DIVISION										
COMM	00049	SWDIV			USEPA	00005											
N68711-92-D4670	01.1	J. PAYNE				00007											
0002						00012											
						00013											
						00016											
						OU 2											
						OU 3											

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M62535 / 000671	10-23-1995	BECHTEL	DRAFT ISSUE PAPER ON FIELD STUDY OF	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST										
CTO-0049/0218	09-11-1995	NATIONAL	MICROPURGING TECHNIQUE TO ASSESS			00003	DIVISION										
MISC	00049	W. MYERS	APPLICABILITY			00005											
N68711-92-D-4670	01.1	SOUTHWEST				00007											
0015		DIVISION				00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000893	06-17-1996	USEPA	USEPA COMMENTS ON BACKGROUND	ADMIN RECORD	COMMENTS	00001	SOUTHWEST										
CTO-0049/0252	09-27-1995	D. HODGES	SOILS ISSUE PAPER		SOIL	00003	DIVISION										
COMM	00049	SOUTHWEST				00005											
N68711-92-D4670	01.1	DIVISION				00007											
0007		J. PAYNE				00012											
						00013											
						00016											
						OU 2											
						OU 3											
M62535 / 000766	04-02-1996	BECHTEL	MINUTES FROM AUGUST 17, 1995	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST										
	09-28-1995	NATIONAL	MEETING HELD TO DISCUSS FIELD		MTG MINS	00003	DIVISION										
MM	00049	W. MYERS	ACTIVITIES AT IR PROGRAM SITES 1, 3, 7,		PEA	00007											
N6871192D467000	01.1	VARIOUS	12, 13, & 16, AND PROPOSALS FOR		TECHNICAL DOC.	00012											
0080		AGENCIES	ADDITIONAL FIELD WORK		USEPA	00016											
						0007N											
						0013W											
						OU 1											
						OU 2											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000683	12-29-1995	BECHTEL	DRAFT FINAL TECHNICAL MEMORANDUM,	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST										
CTO-0049/0288	10-01-1995	NATIONAL	VOLUME I (VOLUME II IS AR # 684)		TECH MEMO	00012	DIVISION										
RPT	00049	W. MYERS	CONSIDERED FINAL PER LETTER DATED		TECHNICAL DOC.	00016											
N68711-92-D-4670	01.1	SOUTHWEST	1/5/98 - REFER TO AR # 1595)			0013E											
0350		DIVISION				0013W											
						0016A											
						0016B											
						0016C											
						OU 1											
						OU 2											
						OU 3											
M62535 / 000684	12-29-1995	BECHTEL	DRAFT FINAL TECHNICAL MEMORANDUM,	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST										
CTO-0049/0288	10-01-1995	NATIONAL	VOLUME II (VOLUME I IS AR # 683)		TECH MEMO	00012	DIVISION										
RPT	00049	W. MYERS	CONSIDERED FINAL PER LETTER DATED		TECHNICAL DOC.	00013											
N68711-92-D-4670	01.1	SOUTHWEST	1/5/98 - REFER TO AR # 1595)			00016											
0500		DIVISION				OU 1											
						OU 2											
						OU 3											
						PARCEL 13W											

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M62535 / 000668		10-23-1995	BECHTEL										DRAFT SCREENING RISK ASSESSMENT	ADMIN RECORD	RA	00001	SOUTHWEST DIVISION
		10-02-1995	NATIONAL										WORK PLAN MCAS TUSTIN		TECHNICAL DOC.	00002	
WKPL		00054														00003	
N86711-92-D4670		01.1	BECHTEL													00005	
0040			NATIONAL													00006	
			SWDIV													00007	
																00008	
																00009	
																00011	
																00012	
																00013	
																00016	
																0013E	
																0013W	
																MMS 03	
																MMS 04	
																MMS 05	
																OU 1	
																OU 2	
																OU 3	
M62535 / 000013		06-19-1996	BECHTEL										INVESTIGATION-DERIVED WASTE -	ADMIN RECORD	IDW	00001	SOUTHWEST DIVISION
		10-16-1995	NATIONAL										OPTIONS FOR DISPOSAL/DOCUMENT			00003	
LTR		00049	J. MATHTHEWS										CONTROL # CTO-0049/0255			00005	
N68711-92-D4670		01.1	SOUTHWEST													00007	
0005			DIVISION													00012	
			P. KENNEDY													00013	
																00016	
																OU 1	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000751		04-02-1996	BECHTEL										MINUTES FROM OCTOBER 19, 1995	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST
		10-25-1995	NATIONAL										MEETING (FOURTH TELECON) HELD TO		MTG MINS	00003	DIVISION
MM		00049	H. MASRI										DISCUSS FIELD PROGRESS TO DATE AT		PROPOSAL	00005	
N6871192D467000		01.1	VARIOUS										SITES 1, 3, 5, 12, 13W AND PROPOSALS		TECHNICAL DOC.	0013W	
0010			AGENCIES										FOR ADDITIONAL FIELD WORK			OU 1	
																OU 2	
																OU 3	
M62535 / 000781		04-03-1996	BECHTEL										MINUTES FROM OCTOBER 12, 1995	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST
		10-25-1995	NATIONAL										WORKING MEETING HELD TO DISCUSS		MTG MINS	00003	DIVISION
MM		00049	H. MASRI										PROGRESS TO DATE ON FIELD ACTIVITIES		TECHNICAL DOC.	00012	
N68711-92-D4670		01.1	VARIOUS										AT SITES 1, 3, 5, 12, 13W, AND 16			00016	
0040			AGENCIES										(INCLUDES OVERSIZED MAPS)			13E	
																13W	
																OU 1	
																OU 2	
																OU 3	
M62535 / 000074		07-09-1996	BECHTEL										IRP-3 SUMMARY DATA PACKAGE	NON-ADMIN	IRP	00003	SOUTHWEST
		11-01-1995	NATIONAL										WORKING DRAFT	RECORD		OU 1	DIVISION
DATA		00049	W. MYERS													OU 2	
N68711-92-D4670		01.1	SOUTHWEST														
0200			DIVISION														
			P. KENNEDY														
M62535 / 000075		07-09-1996	BECHTEL										IRP-12 SUMMARY DATA PACKAGE	NON-ADMIN	IRP	00012	SOUTHWEST
		11-01-1995	NATIONAL										WORKING DRAFT	RECORD		OU 1	DIVISION
DATA		00049	W. MYERS													OU 2	
N68711-92-D4670		01.1	SWDIV														
0200			P. KENNEDY														

UIC No. / Rec. No.

Doc. Control No.

Prc. Date

Author Affil.

Record Type

Record Date

Author

Contr./Guid. No.

CTO No.

Recipient Affil.

Approx. # Pages

EPA Cat. #

Recipient

- - - - - Subject - - - - -

Classification

Keywords

Sites

Location
Box No.

M62535 / 000765

04-02-1996

BECHTEL

MINUTES FROM OCTOBER 26, 1995
MEETING HELD TO DISCUSS FIELD
PROGRESS TO DATE AT SITES 1, 3, 5, 7,
13, 15 AND PROPOSALS FOR ADDITIONAL
FIELD WORK

ADMIN RECORD

IRP
MOFFETT TRENC
MTG MINS
TECHNICAL DOC.
UST

00001
00003
00005
00007
00012
00016
0007N
0007S
0013E
0013W
OU 1
OU 2
OU 3

SOUTHWEST
DIVISION

MM

00049

H. MASRI

N6871192D467000

01.1

VARIOUS
AGENCIES

0007

M62535 / 000969

06-28-1996

BECHTEL

LETTER TRANSMITTING DRAFT
REPLACEMENT COPIES OF THE SUMMARY
DATA PACKAGES FOR SITES 13W, AND 16
UNDER OPERABLE UNIT 2

ADMIN RECORD

TECHNICAL DOC.

00016
OU 2
PARCEL 13W

SOUTHWEST
DIVISION

12-07-1995

MISC

00049

H. MASRI
SOUTHWEST
DIVISION
P. KENNEDY

N6871192D467000

01.1

0005

M62535 / 000706

01-26-1996

BECHTEL

DRAFT FIELD SCREENING INDICATOR
PARAMETERS AND INSTRUMENTATION
ISSUE PAPER

ADMIN RECORD

MOFFETT TRENC
TECHNICAL DOC.

00001
00003
00005
00007
00012
00013
00016
OU 1
OU 2
OU 3

SOUTHWEST
DIVISION

CTO-0049/0333

12-11-1995

NATIONAL

ISPA

00049

W. MYERS
SOUTHWEST
DIVISION

N68711-92-D-4670

01.1

0100

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M62535 / 000144		06-18-1996	DTSC										LETTER SOLICITING APPLICABLE OR	ADMIN RECORD	ARAR	00001	SOUTHWEST DIVISION
		12-14-1995	R. YEAMAN										RELEVANT AND APPROPRIATE		MOFF. PUB PART	00003	
GUID		NONE	VARIOUS										REQUIREMENTS (ARARS)			00005	
NONE		01.1	AGENCIES													00007	
0050																00012	
																00013	
																00016	
																OU 1	
																OU 2	
																OU 3	
M62535 / 000927		06-27-1996	DTSC										LETTER WRITTEN SOLICITING INPUT FROM	ADMIN RECORD	ARAR	00001	SOUTHWEST DIVISION
		12-15-1995	R. YEAMAN										VARIOUS AGENCIES ON APPLICABLE OR			00002	
LTR		NONE	VARIOUS										RELEVANT AND APPROPRIATE			00003	
NONE		01.1	AGENCIES										REQUIREMENTS (ARARS)			00004	
0011																00005	
																00006	
																00007	
																00008	
																00009	
																00010	
																00011	
																00012	
																00013	
																00014	
																00015	
																00016	
																OU 1	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000711	01-26-1996	BECHTEL	DRAFT FINAL UPDATED COMMUNITY	ADMIN RECORD	ARAR	1	SOUTHWEST										
CTO-0063/0196	12-20-1995	NATIONAL	RELATIONS PLAN (INCLUDES REVISED	INFO	BRAC	OU 2	DIVISION										
CRP	00063	A. SCHWARTZ	TRANSMITTAL SHEET)	REPOSITORY	CRP												
N68711-92-D-4670	01.1	SWDIV			DERA												
0100		P. KENNEDY			EE/CA												
					MEK												
					NPL												
					PA												
					PR												
					RAB												
					RCRA												
					RFA												
					RFI												
					ROD												
					SARA												
					SI												
					SWMU												
					UST												
					VSI												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000950		06-28-1996	TUSTIN NEWS		12-28-1995	P. STOKER							PUBLIC NOTICE ANNOUNCING JANUARY 9, 1996 BASE CLOSURE TASK FORCE MEETING	ADMIN RECORD	CLOSURE MEDIA MOFF. PUB PART PUBLIC NOTICE PUBLIC PART.	00001 00002 00003 00004 00005 00006 00007 00008 00009 00010 00011 00012 00013 00014 00015 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
MISC		NONE	PUBLIC														
NONE		10.0															
0001																	
M62535 / 000721		01-30-1996	BECHTEL										DRAFT FINAL - RISK ASSESSMENT WORK PLAN, PART I - HUMAN HEALTH RISK ASSESSMENT (SEE AR # 731 FOR PART II) FINAL PER LETTER DATED 5 JAN. 1998 (SEE AR # 1598)	ADMIN RECORD	MOFFETT TRENC RA TECHNICAL DOC. WORKPLANS	00003 00005 00007 00012 00013 00016 0007N 0007S 0013E 0013W OU 1 OU 2 OU 3	SOUTHWEST DIVISION
CTO-0049/0352		01-12-1996	NATIONAL														
WKPL		00049	W. MYERS														
N68711-92-D-4670		01.1	SOUTHWEST DIVISION														
0125			P. KENNEDY														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000731	01-01-2000	BECHTEL	DRAFT FINAL - RISK ASSESSMENT WORK	ADMIN RECORD	MOFFET TRENCH	12	SOUTHWEST										
CTO-0049/0352	01-24-1996	NATIONAL, INC.	PLAN, PART II - PREDICTIVE ECOLOGICAL		RA	13	DIVISION										
PLAN	00049	W. MYERS	RISK ASSESSMENT (PART I IS AR # 721)		TECH. DOC.	13E											
N68711-92-D-4670	01.1	NAVFAC -	FINAL PER LETTER DATED 5 JAN. 1998		WORK PLAN	13W											
0250		SOUTHWEST	(SEE AR # 1598)			16											
		DIVISION				3											
						5											
						7											
						7N											
						7S											
						OU 1											
						OU 2											
						OU 3											
M62535 / 001783	04-17-2000	DEPT. OF THE	LETTER STATING THAT ONLY DRAINAGES	ADMIN RECORD	BRAC	OU 2	SOUTHWEST										
NONE	01-29-1996	ARMY - ENG.	IDENTIFIED AS 5 SOUTH AND 5 NORTH		IRP		DIVISION										
LTR	NONE	CORPS	ON THE INSTALLATION RESTORATION		WATER												
NONE		M. DURHAM	MAPS ARE SUBJECT TO ARMY														
0002		MCAS TUSTIN	JURISDICTION - THE REST ARE														
		COMMANDING	CONSIDERED IRRIGATION DITCHES AND														
		OFF.	NOT SUBJECT TO ARMY JURISDICTION														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000736	03-08-1996	BECHTEL	FINAL UPDATED COMMUNITY RELATIONS	ADMIN RECORD	ARAR	1	SOUTHWEST										
CTO-0063/0227	02-22-1996	NATIONAL	PLAN	INFO	BRAC	OU 2	DIVISION										
PLAN	00063	A. SCHWARTZ		REPOSITORY	CRP												
N68711-92-D-4670	01.1	SOUTHWEST			DERA												
0125		DIVISION			EE/CA												
		P. KENNEDY			MEK												
					NPL												
					PA												
					PR												
					RAB												
					RCRA												
					RFA												
					RFI												
					ROD												
					SARA												
					SI												
					SWMU												
					UST												
					VSI												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000920	06-27-1996	BECHTEL	BASE REALIGNMENT AND CLOSURE PLAN	ADMIN RECORD	BCP	00001	SOUTHWEST							
	03-01-1996	NATIONAL	(BCP) FOR 1995, DATED MARCH 1996		BRAC	00002	DIVISION							
BCP	NONE	H. MASRI			TECHNICAL DOC.	00003								
N68711-92-D4670	01.1	SWDIV				00004								
0000		P. KENNEDY				00005								
						00006								
						00007								
						00008								
						00009								
						00010								
						00011								
						00012								
						00013								
						00014								
						00015								
						00016								
						OU 1								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.					
Record Type	Record Date	Author						
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.
M62535 / 000913	06-26-1996	BECHTEL	DRAFT ENVIRONMENTAL BASELINE	ADMIN RECORD	EBS	00001	SOUTHWEST	
	04-01-1996	NATIONAL	SURVEY FOR PARCELS, 6, 8B, 11A, 33, 38,			00002	DIVISION	
RPT	NONE	J. YONEKURA	39, 41A, AND 41B			00003		
N68711-92-D4670	01.1	VARIOUS				00006		
0300		AGENCIES				00007		
						00008		
						00009		
						00011		
						00012		
						00016		
						0005N		
						0005S		
						0013E		
						0013W		
						OU 1		
						OU 2		
						OU 3		
						PARCEL 11A		
						PARCEL 33		
						PARCEL 38		
						PARCEL 39		
						PARCEL 41A		
						PARCEL 41B		
						PARCEL 6		
						PARCEL 8B		
M62535 / 000850	06-04-1996	BECHTEL	MINUTES OF APRIL 22-23 1996 BASE	ADMIN RECORD	BCT	00002	SOUTHWEST	
	05-13-1996	NATIONAL	CLOSURE TEAM MEETING		BRAC	00007	DIVISION	
MM	00049	H. MASRI			GROUNDWATER	00009		
N68711-92-D4670	01.1	VARIOUS			MOFFETT TRENC	00016		
0015		AGENCIES			MTG MINS	0013W		
					PRG	OU 1		
					TECHNICAL DOC.	OU 2		
						OU 3		
						UST 226		
						UST 28A		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001156	10-21-1996	BECHTEL	MEETING MINUTES FOR THE TEAM	ADMIN RECORD	MTG MINS	00001	SOUTHWEST							
	05-23-1996	NATIONAL	BUILDING NO.4 MEETING HELD ON MAY 16-			00007	DIVISION							
MM	00039	H. MASRI	17, 1996 OFFICER'S CLUB			OU 1								
N68711-92-D-4670	1.6	SOUTHWEST				OU 2								
0012		DIVISION				OU 3								
		R.SELBY												
M62535 / 000865	06-10-1996	BECHTEL	RESTORATION ADVISORY BOARD JUNE 22,	ADMIN RECORD	COMM REL	00001	SOUTHWEST							
	06-04-1996	NATIONAL	1996 TOUR ANNOUNCEMENT		MOFF. PUB PART	00002	DIVISION							
MISC	0063A	H. MASRI			PUBLIC PART.	00003								
N68711-92-D4670	10.3	SOUTHWEST			RAB	00004								
0002		DIVISION				00005								
		P. KENNEDY				00006								
						00007								
						00008								
						00009								
						00010								
						00012								
						00013								
						00014								
						00015								
						00016								
						OU 1								
						OU 2								
						OU 3								
M62535 / 000994	07-10-1996	BECHTEL	MAY 23, 1996 MINUTES OF THE BASE	ADMIN RECORD	BCT	00001	SOUTHWEST							
	06-25-1996	NATIONAL	CLOSURE TEAM MEETING		MOFFETT TRENC	0013W	DIVISION							
MM	00049	H. MASRI			MTG MINS	OU 1								
N68711-92-D-4670	01.0				TECHNICAL DOC.	OU 2								
0015		VARIOUS				OU 3								
		AGENCIES												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001039	07-22-1996	BECHTEL	LETTER TO THE REGULATORS	ADMIN RECORD	MTG MINS	00001	SOUTHWEST										
	07-09-1996	NATIONAL	REGARDING SOIL BACKGROUND VALUES		SOIL	00003	DIVISION										
LTR	00049	H. MASRI	[MAY 6, 1996 MEETING MINUTES WITH		TECHNICAL DOC.	00005											
N68711-92-D-4670	00.0	SOUTHWEST	SWDIV, DTSC AND EPA ATTACHED TO			00007											
0060		DIVISION	DOC.NO 993]			00012											
		P. KENNEDY				00013											
						00016											
						OU 2											
						OU 3											
M62535 / 001042	07-22-1996	BECHTEL	MINUTES OF THE JUNE 26, 1996 SITE	ADMIN RECORD	MTG MINS	00001	SOUTHWEST										
	07-11-1996	NATIONAL	INVESTIGATION MEETING		SITE INVESTIGAT	00002	DIVISION										
MM	00074	H. MASRI			TECHNICAL DOC.	00003											
N68711-92-D-4670	01.0	SOUTHWEST				00004											
0012		DIVISION				00006											
		VARIOUS				00007											
		AGENCIES				00008											
						00009											
						00010											
						00011											
						00012											
						00014											
						00015											
						00016											
						0005N											
						0005S											
						0013W											
						OU 1											
						OU 2											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000961	06-28-1996	BECHTEL	MEETING MINUTES OF SEPTEMBER 3, 1996	ADMIN RECORD	AOC	1	SOUTHWEST										
CTO-0049/0798,	09-03-1996	NATIONAL	TELECONFERENCE	INFO	BCP	13E	DIVISION										
CTO-0074/0326,	00049			REPOSITORY	COMMENTS	16											
CTO-0081/0125	10.2	NAVFAC -			DQO	19											
MM		SOUTHWEST			FOSL	2											
N68711-92-D-4670		DIVISION			FOST	23											
0005		P. KENNEDY			FS	26											
					RFA	31											
					RI	32											
						5											
						7S											
						9											
						BLDG 93											
						OU 2											
						OU 3											
M62535 / 001147	10-21-1996	BECHTEL	MEETING MINUTES FROM THE	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST										
	09-17-1996	NATIONAL	SEPTEMBER 16, 1996 BCT MEETING		MTG MINS	00002	DIVISION										
MM	00039	H. MASRI			TECHNICAL DOC.	00009											
N68711-92-D-4670	10.4	VARIOUS				OU 1											
0010		AGENCIES				OU 2											
						OU 3											
M62535 / 001152	10-21-1996	BECHTEL	PRE-READING MATERIAL FOR THE	ADMIN RECORD	BCT	00003	SOUTHWEST										
	10-04-1996	NATIONAL	OCTOBER 22, 1996 BCT MEETING			00012	DIVISION										
LTR	00049	H. MASRI				OU 1											
N68711-92-D-4670	10.3	SOUTHWEST				OU 2											
0025		DIVISION															
		P. KENNEDY															
M62535 / 001170	12-02-1996	BECHTEL	RESPONSE TO USEPA, DTSC AND RAB	ADMIN RECORD	COMMENTS	00002	SOUTHWEST										
	10-10-1996	NATIONAL	COMENTS ON THE DRAFT ESI REPORT		ESI	00008	DIVISION										
RESP	00054	H. MASRI	PLUS COVER LETTER SENT TO		TECHNICAL DOC.	OU 2											
N68711-92-D-4670	10.1	SWDIV	REGULATORS														
0020		R.SELBY															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001179	12-02-1996	BECHTEL	DRAFT FINAL BACKGROUND	ADMIN RECORD	GROUNDWATER	00001	SOUTHWEST										
CTO-0049/0793	10-14-1996	NATIONAL	CONCENTRATIONS OF METAL ISSUE		METALS	00003	DIVISION										
RPT	00049	H. MASRI	PAPER		SOIL	00005											
N68711-92-D-4670	03.4	SWDIV			TECHNICAL DOC.	00007											
0060		R.SELBY				00012											
						00013											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 001181	12-02-1996	BECHTEL	DRAFT REMEDIAL INVESTIGATION	ADMIN RECORD	AREA OF CONCE	00003	SOUTHWEST										
CTO-0049/0560	10-16-1996	NATIONAL	REPORT VOLUME 1 THROUGH 5 PLUS		DATA	00005	DIVISION										
RPT	00049	H. MASRI	COVER LETTER AND TRANSMITTAL TO		DQOP	00007											
N68711-92-D-4670	03.4	VARIOUS	BCT MEMBERS (INCLUDES DRAFT		ESI	00012											
1000		AGENCIES	BACKGROUND SOILS AND GROUNDWATER		GROUNDWATER	00013											
			REPORT & REPLACEMENT PAGES FOR		LAB	00016											
			SECTION 3, APPENDIX G, & APPENDIX X		MOFFETT TRENC	0013E											
			DATED 11/7/96)		REMEDIAL INVES	0013W											
					RISK	OU 1											
					SOIL	OU 2											
					TECHNICAL DOC.	OU 3											
M62535 / 001233	03-06-1997	EPA SAN	LETTER REQUESTING ADDITIONAL TIME	ADMIN RECORD	OPERABLE UNIT	OU 1	SOUTHWEST										
	11-18-1996	FRANCISCO	TO REVIEW DRAFT REMEDIAL		REMEDIAL INVES	OU 2	DIVISION										
LTR	NONE	D. HODGES	INVESTIGATION REPORT FOR OPERABLE		TECHNICAL DOC.												
NONE	03.4	VARIOUS	UNITS 1 AND 2														
0001		AGENCIES															
M62535 / 001444	09-24-1997	EPA SAN	USEPA REVIEW OF THE DRAFT REMEDIAL	ADMIN RECORD	OPERABLE UNIT	OU 1	SOUTHWEST										
	11-19-1996	FRANCISCO	INVESTIGATION REPORT FOR OPERABLE		REMEDIAL INVES	OU 2	DIVISION										
LTR	00049	D. HODGES	UNITS 1 AND 2.		TECHNICAL DOC.												
NONE	3.6	VARIOUS			USEPA												
0001		AGENCIES															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001217		03-05-1997	MCAS TUSTIN							CONFIRMATION OF RECEIPT OF LETTER REQUESTING EXTENSION FOR COMMENTS REGARDING DRAFT REMEDIAL INVESTIGATION REPORT FOR OU1 AND 2, COMMENTS DUE DECEMBER 6, 1996	ADMIN RECORD	COMMENTS REMEDIAL INVES TECHNICAL DOC.	OU 1 OU 2	SOUTHWEST DIVISION
LTR		11-20-1996	D. CHANDLER											
NONE		NONE	VARIOUS											
0001		3.6	AGENCIES											
M62535 / 001439		09-24-1997	VARIOUS							DATA PACKAGE INCLUDES DTSC AND EPA COMMENTS ON DRAFT REMEDIAL INVESTIGATION REPORT DATED OCTOBER 1996 DATES OF LETTERS THROUGH DEC 1996	ADMIN RECORD	COMMENTS FEASIBILITY STU. IRP OPERABLE UNIT REMEDIAL INVES RISK SITE INSPECTION TECHNICAL DOC. VOC	00003 00005 00006 00009 00012 00013 00016 MMS 05 OU 1 OU 2 ST 67 ST 72	SOUTHWEST DIVISION
LTR		12-01-1996	AGENCIES											
NONE		NONE	VARIOUS											
0009		3.6	AGENCIES											
M62535 / 001251		03-10-1997	EPA SAN FRANCISCO							REQUEST FOR EXTENSION REGARDING REVIEW AND COMMENTS ON THE DRAFT FEASIBILITY STUDY REPORT FOR OPERABLE UNITS 1 AND 2	ADMIN RECORD	COMMENTS FEASIBILITY STU. OPERABLE UNIT TECHNICAL DOC.	OU 1 OU 2	SOUTHWEST DIVISION
LTR		12-06-1996	D. HODGES											
NONE		NONE	VARIOUS											
0001		04.2	AGENCIES											
M62535 / 001253		03-10-1997	MCAS TUSTIN							CONFIRMATION OF RECEIPT OF REQUEST FOR EXTENSION REGARDING REVIEW OF THE DRAFT FEASIBILITY STUDY REPORT FOR OU 1 AND 2 COMMENTS DUE JANUARY 10TH, 1997	ADMIN RECORD	COMMENTS FEASIBILITY STU.	OU 1 OU 2	SOUTHWEST DIVISION
LTR		12-12-1996	D. CHANDLER											
NONE		NONE	VARIOUS											
0001		04.2	AGENCIES											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001318	04-01-1997	BECHTEL	OCTOBER 24, 1996 RESTORATION	ADMIN RECORD	MTG MINS	00007	SOUTHWEST							
	01-06-1997	NATIONAL	ADVISORY BOARD POST MEETING		PUBLIC PART.	00013	DIVISION							
MM	00063	H. MASRI	MATERIAL - MEETING MINUTES AND		RAB	00015								
N68711-92-D-4670	10.4	DISTRUBUTION	ATTACHMENTS			00016								
0012						0013S								
						OU 1								
						OU 2								
						OU 3								
						ST 72								
M62535 / 001352	04-30-1997	BECHTEL	REQUEST FOR REVIEW OF APPENDIX N	ADMIN RECORD	REMEDIAL INVES	OU 1	SOUTHWEST							
	01-16-1997	NATIONAL	OF THE REMEDIAL INVESTIGATION		TECHNICAL DOC.	OU 2	DIVISION							
LTR	00049	H. MASRI	REPORT WITH ATTACHMENT											
N68711-92-D-4670	03.4	VARIOUS												
0060		AGENCIES												
M62535 / 001308	04-01-1997	DTSC LONG	REVIEW COMMENTS ON THE REMEDIAL	ADMIN RECORD	COMMENTS	00003	SOUTHWEST							
	01-24-1997	BEACH	INVESTIGATION/ FEASIBILITY STUDY FOR		FEASIBILITY STU.	00006	DIVISION							
COMM	00049	M. IBRAHIM	OPERABLE UNIT 1 AND OPERABLE UNIT 2		OPERABLE UNIT	00009								
NONE	10.1	VARIOUS			REMEDIAL INVES	00012								
0016		AGENCIES			TECHNICAL DOC.	0007N								
						0007S								
						0013W								
						MMS 05								
						OU 1								
						OU 2								
						ST 72								
M62535 / 001350	04-30-1997	BECHTEL	JANUARY 30 1997 RESTORATION	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST							
	01-30-1997	NATIONAL	ADVISORY BOARD (RAB) PRE- MEETING		NOTICE	OU 2	DIVISION							
LTR	00063	H. MASRI	MATERIAL (MEETING NOTICE AND DRAFT		OPERABLE UNIT									
N68711-92-D-4670	10.3	SOUTHWEST	AGENDA) UNREDACTED VERSION AT		PUBLIC PART.									
0009		DIVISION	SOUTHWEST DIVISION		RAB									
		R.SELBY			REMEDIAL INVES									
					SURVEY									

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Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001314	04-01-1997	BECHTEL	FEBRUARY 27, 1997 RESTORATION	ADMIN RECORD	MTG MINS	OU 1	SOUTHWEST							
	02-18-1997	NATIONAL	ADVISORY BOARD PRE-MEETING		PUBLIC	OU 2	DIVISION							
NOTE	00063	H. MASRI	MATERIALS (MEETING NOTICE AND DRAFT		PUBLIC PART.	OU 3								
N68711-92-D-4670	10.3	SOUTHWEST	AGENDA)		RAB									
0003		R.SELBY												
M62535 / 001538	01-27-1998	BECHTEL	FEBRUARY 27, 1997 MEETING MINUTES	NON-ADMIN	IRP	00002	SOUTHWEST							
	03-11-1997	NATIONAL		RECORD	OPERABLE UNIT	00009	DIVISION							
MM	00063	H. MASRI			RAC	0013W								
N68711-92-D-4670	00.0	VARIOUS			ROD	AST 169								
0003		AGENCIES				AST 170								
						OU 1								
						OU 2								
M62535 / 001398	05-21-1997	BECHTEL	MINUTES FROM THE APRIL 9, 1997 BCT	ADMIN RECORD	BCT	00001	SOUTHWEST							
	04-09-1997	NATIONAL	MEETING		MOFFETT TRENC	00006	DIVISION							
MM	00049	H. MASRI			MTG MINS	00012								
N68711-92-D-4670	10.4	VARIOUS			TECHNICAL DOC.	0013S								
0023		AGENCIES				0013W								
						MWA 18								
						OU 1								
						OU 2								
						OU 3								
						ST 72								
M62535 / 001344	04-30-1997	EPA SAN	USEPA REVIEW OF THE DRAFT REMEDIAL	ADMIN RECORD	OPERABLE UNIT	OU 1	SOUTHWEST							
	04-15-1997	FRANCISCO	INVESTIGATION REPORT FOR OPERABLE		REMEDIAL INVES	OU 2	DIVISION							
LTR	00049	N. MOUTOUX	UNIT 1 & OPERABLE UNIT 2		TECHNICAL DOC.	OU 3								
NONE	03.4	VARIOUS												
0004		AGENCIES												

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M62535 / 001343		04-30-1997	BECHTEL										RESPONSE TO BCT COMMENTS ON THE	ADMIN RECORD	BCT	00003	SOUTHWEST
		04-21-1997	NATIONAL										REMEDIAL INVESTIGATION REPORTS AND		COMMENTS	00005	DIVISION
RESP		00049	H. MASRI										THE FEASIBILITY STUDY REPORTS		FEASIBILITY STU.	00006	
N68711-92-D-4670		10.1	VARIOUS												REMEDIAL INVES	00009	
0027			AGENCIES												TECHNICAL DOC.	00012	
																00016	
																0007N	
																0007S	
																0013S	
																0013W	
																DSS 01	
																DSS 02	
																MMS 05	
																OU 1	
																OU 2	
																OU 3	
																ST 67	
																ST 72	
M62535 / 001415		06-18-1997	BECHTEL										DRAFT FINAL RCRA FACILITY	ADMIN RECORD	RCRA	AMS 04	SOUTHWEST
CTO-0074/0344		04-21-1997	NATIONAL										ASSESSMENT REPORT, VOLUME 5		TECHNICAL DOC.	DI 01	DIVISION
RPT		00074	J. GOUGE										(ACCEPTED AS FINAL PER NOTIFICATION			DSD 03	
N68711-92-D-4670		01.1	VARIOUS										TO REGULATORS ON 1/5/98 - A.R. #1597)			DSD 08	
0500			AGENCIES													MDA 1	
																MDA 10	
																MDA 2	
																MDA 3	
																MDA 4	
																MDA 5	
																MDA 6	
																MDA 7	
																MDA 8	
																MDA 9	
																OU 2	
																OU 4	

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M62535 / 001407	06-16-1997	05-01-1997	BECHTEL NATIONAL							RESPONSE TO SUBCOMMITTEE & CITY OF TUSTIN'S COMMENTS ON THE DRAFT REMDIAL INVESTIGATION REPORT OPERABLE UNIT 1 AND 2	ADMIN RECORD	COMMENTS REMEDIAL INVES TECHNICAL DOC.	00001 00003 00005 00012 00013 00016 0013W OU 1 OU 2 ST 72	SOUTHWEST DIVISION
COMM N68711-92-D-4670 0011	00049 10.1		H. MASRI VARIOUS AGENCIES											
M62535 / 001437	09-22-1997	05-22-1997	CITY OF TUSTIN D. OGDEN							FINAL RESPONSES TO SUBCOMMITTEE COMMENTS FOR DRAFT REMEDIAL INVESTIGATION REPORT OPERABLE UNITS 1 AND 2	ADMIN RECORD	COMMENTS OPERABLE UNIT REMEDIAL INVES	00003 00013 0013W OU 1 OU 2	SOUTHWEST DIVISION
LTR NONE 0002	NONE 10.1		MCAS TUSTIN D. CHANDLER											
M62535 / 001488	11-17-1997	07-08-1997	BECHTEL NATIONAL							JUNE 24, 1997 BCT MEETING MINUTES	ADMIN RECORD	BCT COMMENTS EBS FOSL FOST GROUNDWATER MOFFETT TRENC MONITORING ROD TECHNICAL DOC.	00001 00002 00003 00012 00016 00105 0013S 0013W BLDG. 174 BLDG. 29 BLDG. 93 OU 1 OU 2 OU 3 PARCEL 18 PARCEL 33 UST 1 UST 29 A UST 300	SOUTHWEST DIVISION
MM N68711-92-D-4670 0012	00049 10.4		H. MASRI VARIOUS AGENCIES											

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M62535 / 001458	09-29-1997	BECHTEL	JULY 24, 1997 BCT MEETING MINUTES	ADMIN RECORD	AST	1	SOUTHWEST										
CTO-0049/1190,	07-24-1997	NATIONAL			BCT	12	DIVISION										
CTO-0085/0342, &	00049				COMMENTS	13S											
CTO-0141/0065	10.4	NAVFAC -			GW	13W											
MM		SOUTHWEST			LF	16B											
N68711-92-D-4670		DIVISION			MONITORING	2											
0014					MTG MINS	7											
					PRG	9											
					RAB	AST 169											
					RI	AST 170											
					RISK	AST 227											
					ROD	AST 27											
					TPH	AST 28A											
					UST	AST 6169 B											
						OU 1											
						OU 2											
						OU 3											
						PARCEL 33											
						ST 72											
						UST 181											
						UST 23											
						UST 27A											
						UST 27B											
						UST 42											
						UST 530 A											
M62535 / 001469	11-11-1997	MCAS TUSTIN	CAPTAIN GEORGE OPRIA'S COMMENTS	ADMIN RECORD	BRAC	00003	SOUTHWEST										
	07-28-1997	G. OPRIA	ON RESPONSE TO COMMENTS ON		COMMENTS	00012	DIVISION										
COMM	00049	VARIOUS	OPERABLE UNIT 1 FEASIBILITY STUDY		FEASIBILITY STU.	0013S											
NONE	10.1	AGENCIES			LEAD	0013W											
0027					REMEDIAL INVES	OU 1											
					REUSE	OU 2											
						OU 3											
						ST 72											

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M62535 / 001463		11-11-1997	BECHTEL										RESPONSES TO RAB SUBCOMMITTEE AND CITY OF TUSTIN COMMENTS ON THE MCAS TUSTIN OPERABLE UNIT 1 FEASIBILITY STUDY REPORT	ADMIN RECORD	BRAC	00003	SOUTHWEST
		07-30-1997	NATIONAL												FEASIBILITY STU.	00012	DIVISION
RESP		00049	D. TEDALDI												GROUNDWATER	0013S	
NONE		10.1	VARIOUS												RAB	OU 1	
0021			AGENCIES												REMEDIAL INVES	OU 2	
															TCE	ST 72	
															TPH		
M62535 / 001464		11-11-1997	BECHTEL										REPONSES TO U.S. EPA COMMENTS ON THE MCAS TUSTIN IRP-13S INSERTS TO THE REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	CANCER	0013S	SOUTHWEST
		07-30-1997	NATIONAL												COMMENTS	OU 1	DIVISION
RESP		00049	D. TEDALDI												GROUNDWATER	OU 2	
N68711-92-D-4670		10.1	VARIOUS												SOIL		
0001			AGENCIES														
M62535 / 001467		11-11-1997	BECHTEL										RESPONSES TO RAB SUBCOMMITTEE AND CITY OF TUSTIN COMMENTS ON THE MCAS TUSTIN IRP-13S INSERTS TO THE REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS	00003	SOUTHWEST
		07-30-1997	NATIONAL												GROUNDWATER	00016	DIVISION
RESP		00049	D. TEDALDI												RAB	0013E	
N68711-92-D-4670		10.1	VARIOUS												REMEDIAL INVES	0013S	
0008			AGENCIES												SOIL	0013W	
																OU 1	
																OU 2	
																ST 72	
M62535 / 001552		02-10-1998	BECHTEL										REVISED RESPONSES TO RAB SUBCOMMITTEE AND CITY OF TUSTIN COMMENTS ON OPERABLE UNIT 1 FEASIBILITY STUDY REPORT	ADMIN RECORD	COMMENTS	00003	SOUTHWEST
		08-20-1997	NATIONAL												FEASIBILITY STU.	00012	DIVISION
RESP		00049	D. TEDALDI												REMEDIAL INVES	0013S	
N68711-92-D-4670		10.1	VARIOUS													OU 1	
0011			AGENCIES													OU 2	
																ST 72	

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M62535 / 001507		12-03-1997	BECHTEL										AUGUST 21, 1997 RESTORATION	ADMIN RECORD	CLEANUP	00003	SOUTHWEST
		08-21-1997	NATIONAL										ADVISORY BOARD PRE-MEETING AND		COMMENTS	00012	DIVISION
MISC		NONE											POST-MEETING MATERIAL (NOTICE,		MOFFETT TRENC	00016	
NONE		10.4	VARIOUS										AGENDA AND ATTACHMENTS)		PUBLIC PART.	0013E	
0075			AGENCIES												RAB	0013S	
																0013W	
																OU 1	
																OU 2	
																OU 3	
																ST 72	
M62535 / 001555		02-10-1998	BECHTEL										DRAFT PAH APRON STUDY WORK PLAN -	ADMIN RECORD	COMMENTS	00009	SOUTHWEST
		11-10-1997	NATIONAL										RESPONSE TO COMMENTS FROM USEPA		WORKPLANS	APRON 1	DIVISION
RESP		00141	D. TEDALDI													APRON 4	
N68711-92-D-4670		10.1	VARIOUS													HANGAR 1	
0006			AGENCIES													OU 1	
																OU 2	

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M62535 / 001505	12-03-1997	BECHTEL	DRAFT FINAL REMEDIAL INVESTIGATION	ADMIN RECORD	AREA OF CONCE	00001	SOUTHWEST										
CTO-0049/1165	11-14-1997	NATIONAL	REPORT FOR OPERABLE UNITS 1 AND 2		CANCER	00003	DIVISION										
RPT	00049	M. DALRYMPLE	VOLUMES 1 THROUGH 5 (ACCEPTED AS		GROUNDWATER	00005											
N68711-92-D-4670	03.4	SOUTHWEST	FINAL PER 2/18/98 NOTIFICATION TO		IRP	00006											
1500		DIVISION	REGULATORS - REFER TO AR #'S 1593 &		REMEDIAL INVES	00007											
			1627) (INCLUDES REPLACEMENT PAGES		SOIL	00008											
			OF 11/97 FOR VOL. 3, DCN# CTO-0049/1241)		TCE	00009											
					TECHNICAL DOC.	00011											
					VOC	00012											
						00013											
						00016											
						0007N											
						0007S											
						0013E											
						0013S											
						0013W											
						AST 169											
						AST 170											
						DSS 01											
						DSS 02											
						MDA 02											
						MDA 04											
						MMS 04											
						MMS 05											
						MWA 18											
						OU 1											
						OU 2											
						OU 3											
						ST 67											
						ST 72											
						TOW 18 A											
						UST 29 A											
						UST 90											

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M62535 / 001598	03-05-1998	BECHTEL	NOTIFICATION THAT DRAFT FINAL RISK	ADMIN RECORD	MOFFETT TRENC	12	SOUTHWEST										
CTO-0049/1230	01-05-1998	NATIONAL	ASSESSMENT WORK PLAN PARTS I & II		RA	13	DIVISION										
LTR	00049	D. TEDALDI	DATED JAN. 1996 (SEE AR #'S 721 & 731)		TECH. DOC.	13E											
N68711-92-D-4670	01.6	VARIOUS	ARE CONSIDERED FINAL			13W											
0001		AGENCIES				16											
						3											
						5											
						7											
						7N											
						7S											
						OU 1											
						OU 2											
						OU 3											

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M62535 / 001631		05-14-1998	BECHTEL										JANUARY 22, 1998 RESTORATION	ADMIN RECORD	IRP	00001	SOUTHWEST DIVISION
		01-22-1998	NATIONAL										ADVISORY BOARD PRE- AND POST-		MOFF. PUB PART	00002	
MM		00155	D. TEDALDI										MEETING MATERIALS (PUBLIC NOTICE,		MTG MINS	00005	
N68711-92-D-4670		10.4	DISTRUBUTION										AGENDA, MEETINGMINUTES, HANDOUTS)		PAH	00009	
0070															RAB	00023	
															UST	00026	
																00042	
																00047	
																00058	
																0007S	
																00135	
																0013W	
																00171	
																00181	
																00185	
																00222	
																0027A	
																0027B	
																00300	
																00530A	
																0133B	
																AST 169	
																AST 170	
																OU 1	
																OU 2	
																OU 3	
M62535 / 001627		05-07-1998	BECHTEL										RESPONSE TO DTSC COMMENTS ON	ADMIN RECORD	COMMENTS	00005	SOUTHWEST DIVISION
		02-18-1998	NATIONAL										DRAFT FINAL REMEDIAL INVESTIGATION		REMEDIAL INVES	0005N	
RESP		00141	D. TEDALDI										FOR OU 1 & OU 2 DATED NOVEMBER 1997			0005S	
N68711-92-D-4670		10.1	VARIOUS										& NOTIFICATION THAT IT IS TO BE			OU 1	
0004			AGENCIES										CONSIDERED A FINAL DOC. (REFER TO AR			OU 2	
													#S 1505 & 1593)				

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M62535 / 001613		04-28-1998	BECHTEL										DRAFT TECHNICAL MEMORANDUM: TCE-IN-	ADMIN RECORD	IRP	00003	SOUTHWEST
		03-01-1998	NATIONAL										SOIL CONFIRMATION SAMPLING, PILOT-		TCE	00012	DIVISION
RPT		00141	T. FENG										SCALE EXTRACTION TEST, BENCH-SCALE		TECH MEMO	0013S	
N68711-92D4670		03.4	SOUTHWEST										COLUMN TEST, AND MODEL SENSITIVITY			BLDG. 174	
1000			DIVISION										ANALYSIS			BLDG. 20 B	
																BLDG. 29 A	
																BLDG. 514	
																MWA 18	
																OU 1	
																OU 2	
																ST 72	

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M62535 / 001632		05-14-1998	BECHTEL										MARCH 12, 1998 RESTORATION ADVISORY	ADMIN RECORD	BCP	00002	SOUTHWEST DIVISION
		03-12-1998	NATIONAL										BOARD PRE- AND POST-MEETING		IRP	00003	
MM		00155	D. TEDALDI										MATERIALS (PUBLIC NOTICE, AGENDA, MEETING MINUTES, HANDOUTS)		MTG MINS	00005	
N68711-92-D-4670		10.4	DISTRUBUTION												RAB	00006	
0080															UST	00008	
																00009	
																00011	
																00012	
																00042	
																00047	
																0007S	
																0013E	
																0013S	
																0013W	
																00185	
																00222	
																0023C	
																0027A	
																0027B	
																00300	
																00530A	
																AST 169	
																AST 170	
																HANGAR 1	
																HANGAR 2	
																OU 1	
																OU 2	
																OU 3	
																PARCEL 11A	
																PARCEL 33	
																PARCEL 38	
																PARCEL 39	
																PARCEL 41A	
																PARCEL 41B	
																PARCEL 6	

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																PARCEL 8 B	
																PARCEL 8 C	
M62535 / 001642		06-16-1998	BECHTEL										DRAFT 1997 ANNUAL GROUNDWATER	ADMIN RECORD	GROUNDWATER	00001	SOUTHWEST
		04-01-1998	NATIONAL										MONITORING REPORT VOLUMES I AND II		IRP	00006	DIVISION
RPT		00141	T. FENG												MOFFETT TRENC	00008	
N68711-92-D-4670		03.4	VARIOUS												MONITORING	00011	
1000			AGENCIES												VOC	00012	
																00016	
																0013S	
																0013W	
																DSS 01	
																DSS 02	
																MDA 02	
																MMS 04	
																MMS 05	
																MWA 18	
																OU 1	
																OU 2	
																OU 3	
																ST 72	
																TOW 18 A	

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Doc. Control No.

Prc. Date

Author Affil.

Record Type

Record Date

Author

Contr./Guid. No.

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----- Subject -----

Classification

Keywords

Sites

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Box No.

M62535 / 001641

06-16-1998

BECHTEL

FINAL PAH APRON STUDY REPORT

ADMIN RECORD

AOC

00009

SOUTHWEST

CTO-0141/0244

06-01-1998

NATIONAL

IRP

0007N

DIVISION

RPT

00141

T. FENG

PAH

0007S

N68711-92-D-4670

03.4

VARIOUS

TPH

0009A

0300

AGENCIES

0009B

AMS 04

AMW 01 A

APRON 1

APRON 2

APRON 3

APRON 4

DSD 03

DSD 08

HANGAR 1

MDA 01

MDA 05

OU 2

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M62535 / 001644		07-07-1998	BECHTEL										DRAFT BASEWIDE ENVIRONMENTAL	ADMIN RECORD	EBS	00001	SOUTHWEST DIVISION
		06-01-1998	NATIONAL										BASELINE SURVEY		IRP	00002	
RPT		00085	S. BOBB													00003	
N68711-92-D-4670		01.4	VARIOUS													00004	
1000			AGENCIES													00005	
																00006	
																00007	
																00008	
																00009	
																00010	
																00011	
																00012	
																00013	
																00014	
																00015	
																00016	
																0009B	
																0013S	
																0013W	
																AST 169	
																AST 170	
																AST 194 A	
																AST 194 B	
																MMS 03	
																MMS 04	
																MMS 05	
																MWA 18	
																OU 1	
																OU 2	
																OU 3	
																ST 72	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001688		09-29-1998	BECHTEL							JULY 14, 1998 BCT MEETING MINUTES	ADMIN RECORD	BCT	00003	SOUTHWEST
		07-16-1998	NATIONAL							WITH HANDOUTS		MTG MINS	00006	DIVISION
MM		00155	D. TEDALDI									NO FURTH. ACTI	00012	
N68711-92-D-4670		10.4	VARIOUS										0013S	
0085			AGENCIES										DSS 1	
													DSS 2	
													MDA 2	
													MMS 5	
													OU 1	
													OU 2	
													ST 67	
M62535 / 001799		04-19-2000	THE PLANNING							SPECIFIC PLAN/REUSE PLAN (ERRATA)	ADMIN RECORD	BRAC	OU 2	SOUTHWEST
NONE		09-01-1998	CENTER									PLAN		DIVISION
PLAN		NONE												
NONE			CITY OF TUSTIN											
0300														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001713		01-13-1999	BECHTEL										RESPONSES TO BCT COMMENTS DATED	ADMIN RECORD	AREA OF CONCE	00002	SOUTHWEST
		10-22-1998	NATIONAL										JULY 2, JULY 6, AUGUST 14, 1998 ON THE		BCT	00005	DIVISION
RESP		00155	D. TEDALDI										WORKING DRAFT NO FURTHER ACTION		COMMENTS	00006	
N6781192D4670		10.1	VARIOUS										PLAN		NO FURTH. ACTI	00008	
0024			AGENCIES													00011	
																00016	
																0013E	
																0013W	
																AD 04	
																AS 06	
																AS 08	
																AST 02	
																AST 04	
																DSS 01	
																DSS 02	
																MDA 02	
																MDA 04	
																MDA 07	
																MMS 04	
																MMS 05	
																MWA 03	
																OU 1	
																OU 2	
																ST 67	
M62535 / 001700		12-31-1998	BECHTEL										DRAFT RECORD OF DECISION OPERABLE	ADMIN RECORD	CRASH BURN PIT	00001	SOUTHWEST
		12-01-1998	NATIONAL										UNIT 3 MOFFETT TRENCHES AND CRASH		MOFFETT TRENC	OU 1	DIVISION
RPT		00141	D. TEDALDI										CREW BURN PITS SITE		ROD	OU 2	
N68711-92-D-4670		05.1	VARIOUS													OU 3	
0085																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001702		12-31-1998	BECHTEL										REVISED DRAFT FEASIBILITY STUDY	ADMIN RECORD	FEASIBILITY STU.	00003	SOUTHWEST
		12-18-1998	NATIONAL										REPORT FOR OPERABLE UNIT 1		IRP	00012	DIVISION
RPT		00141	T. FENG										(REFERENCE AR #1510 RESPONSE TO		VOC	0013S	
N68711-92-D-4670		04.2	VARIOUS										COMMENTS DRAFT FS REPORT; AR #1720,			MWA 18	
1000			AGENCIES										3/2/99 DRAFT FEASIBILITY STUDY REPORT;			OU 1	
													AR #1731, RESPONSE TO COMMENTS ON			OU 2	
													3/2/99 DRAFT FEASIBILTY STUDY REPORT)			PETERS CAN	
																ST 72	
M62535 / 000029		10-26-1999	BECHTEL										DRAFT - TECHNICAL MEMORANDUM: PILOT-	ADMIN RECORD	GW	12	SOUTHWEST
CTO-0167/0071		02-09-1999	NATIONAL INC										SCALE VACUUM-ENHANCED EXTRACTION		MONITORING	13S	DIVISION
RPT		00167	T. FENG										TEST		SOIL	3	
N68711-92-D-4670		03.4	VARIOUS												TCE	OU 1	
0550			AGENCIES												TECH MEMO	OU 2	
															WELLS		

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Record Type	Record Date	Author						
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.	
M62535 / 001742	04-17-2000	BECHTEL	DRAFT TECHNICAL MEMORANDUM PILOT-	ADMIN RECORD	BCP	12	SOUTHWEST	
CTO-0167/0071	02-09-1999	NATIONAL INC	SCALE VACUUM-ENHANCED EXTRACTION		BCT	13S	DIVISION	
RPT	00167	T. FENG	TEST (REFERENCE AR #1771, RESPONSE		BRAC	3		
N68711-92-D-4670		NAVFAC -	TO COMMENTS REGARDING TECHNICAL		COPC	MWA 18		
0500		SOUTHWEST	MEMORANDUM, ALSO INCLUDES		DQO	OU 1		
		DIVISION	REPLACEMENT PAGES DATED JULY 1999)		FID	OU 2		
		R. SELBY			FS			
					GAC			
					IRP			
					OU			
					OVA			
					PVC			
					QAPP			
					RI			
					SAP			
					SVE			
					TCE			
					TCP			
					TOC			
					TPH			
					VEE			
					VOC			

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Doc. Control No.

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Author Affil.

Record Type

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Author

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Recipient

----- Subject -----

----- Classification -----

Keywords

Sites

Location

Box No.

M62535 / 001764

07-01-1999

BECHTEL

DRAFT 1998 ANNUAL GROUNDWATER
MONITORING REPORT, VOLUMES I & II
(VOL. I REVISED FOR FINAL [AR #649] VOL.
II OF THIS DOC. BECAME FINAL WITHOUT
CHANGES ON 12/10/99)

ADMIN RECORD

AOC

1

SOUTHWEST
DIVISION

CTO-0170/0107 &

06-03-1999

NATIONAL

BCP

12

CTO-0170/0195

00170

D. TEDALDI

BRAC

13S

RPT

00.0

SOUTHWEST

COPC

3

N68711-92-D-4670

DIVISION

DCA

OU 1

0600

R.SELBY

DCB

OU 2

DCE

OU 3

DCP

DMP

DQO

FS

GW

IRP

MEMORANDUM

MONITORING

MTBE

NFA

PCE

PRG

QA

QC

RAB

RFA

RI

ROD

SI

SOP

TCE

TCP

TIC

TPH

UST

VOC

WATER

WELLS

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M62535 / 001801	04-19-2000	BECHTEL	REMEDIAL ACTION PLAN/PROPOSED PLAN	ADMIN RECORD	AOC	11	SOUTHWEST										
CTO-0155/0498	07-01-1999	NATIONAL INC	FOR NO FURTHER ACTION AT TWENTY		ARAR	13E	DIVISION										
RPT	00155	D. TEDALDI	THREE IRP SITES AND AREAS OF		AST	13W											
N68711-92-D-4670		NAVFAC -	CONCERN (INCLUDES RESPONSE TO		BRAC	16											
0033		SOUTHWEST	COMMENTS OF THE USEPA, DTSC, AND		BTEX	2											
		DIVISION	SARWQCB)		COPC	5N											
		R. SELBY			DCE	5S											
					GW	6											
					IRP	8											
					METALS	AD 04											
					PAH	AST 02											
					PCB	AST 04											
					PCE	BLDG 161											
					PESTICIDES	BLDG 19											
					PRG	BLDG 262											
					RCRA	BLDG 263											
					RFA	BLDG 28											
					RI	BLDG 71A											
					ROD	BLDG 71G											
					SOIL	BLDG 71H											
					SVOC	BLDG 71I											
					TCE	DSS 01											
					TPH	DSS 02											
					TRPH	MDA 02											
					VOC	MDA 04											
					WATER	MDA 07											
						MMS 01											
						MMS 04											
						MMS 05											
						MWA 03											
						OU 1											
						OU 2											
						ST 67											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000540	12-16-1999	BECHTEL	DRAFT - SITE MANAGEMENT PLAN	ADMIN RECORD	AOC	1	SOUTHWEST							
CTO-0187/0057	11-18-1999	NATIONAL INC		INFO	GW	11	DIVISION							
PLAN	00187	T. HEIRONIMUS		REPOSITORY	RCRA	12								
N68711-92-D-4670	03.3	VARIOUS			SMP	13E								
0110		AGENCIES			SOIL	13S								
					UST	13W								
					VOCS	16								
						2								
						3								
						5								
						6								
						8								
						OU 1								
						OU 2								
						OU 3								
						OU 4								
M62535 / 000816	12-21-1999	BECHTEL	ADDENDUM TO THE NON-TIME-CRITICAL	ADMIN RECORD	ACTMEMO	2	SOUTHWEST							
CTO-0187/0065	12-01-1999	NATIONAL INC	REMOVAL ACTION MEMORANDUM/	INFO	SOIL	9	DIVISION							
MISC	00187	T. HEIRONIMUS	REMOVAL ACTION WORK PLAN FOR OIL	REPOSITORY	WORK PLAN	9B								
N68711-92-D-4670	02.5	VARIOUS	DISPOSAL AREA AND HANGAR NO. 1 LINE			OU 2								
0025		AGENCIES	SHACKS											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000805	NONE	12-17-1999	SOUTHWEST DIVISION		12-06-1999								RESPONSE TO COMMENTS ON DRAFT REMEDIAL ACTION PLAN/PROPOSED PLAN FOR NO FURTHER ACTION AT TWENTY-THREE IRP SITES AND AREAS OF CONCERN (REFERENCE AR #1624 DRAFT NO FURTHER ACTION PROPOSED PLAN)	ADMIN RECORD INFO REPOSITORY	AOC COMMENTS NFA RESPONSE	13E 2 9A 9B AD 04 AS 06 AS 08 AST 02 AST 04 MDA 04 MDA 07 MMS 01 MWA 03 OU 2	SOUTHWEST DIVISION
M62535 / 001806	CTO-0187/0083	04-19-2000	BECHTEL NATIONAL INC		12-09-1999								BRAC CLEANUP TEAM MEETING MINUTES FOR DECEMBER 9, 1999 - SITE MANAGEMENT PLAN, OU-1 FS, ADDENDUM TO SITES 9A/9B ACTION MEMO, OU-2 NFA PROPOSED PLAN, OU-3 UPDATE, OU-4 UPDATE, ST-7/8 CLOSURE REPORT, RAC UPDATE, MTBE UPDATE, & SCHEDULE OF DELIVERABLES	ADMIN RECORD	AOC ARAR BCP BRAC EE/CA FS GW METALS MTBE PAH PESTICIDES RFA RI ROD SOIL SVOC TCP TPH VOC	11 13W 16 2 5 6 8 9 MWA 18 OU 1 OU 2 OU 3 OU 4 ST 18B	SOUTHWEST DIVISION
N68711-92-D-4670 0006		10.1	VARIOUS AGENCIES														
N68711-92-D-4670 0100			NAVFAC - SOUTHWEST DIVISION R. SELBY														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001792	04-18-2000	LA TIMES	PUBLIC NOTICE REGARDING THE	ADMIN RECORD	AOC	13E	SOUTHWEST							
NONE	12-30-1999		PROPOSED PLAN/DRAFT REMEDIAL		BCT	2	DIVISION							
MISC	NONE	NAVFAC -	ACTION PLAN FOR NO FURTHER ACTION -		BRAC	9								
NONE		SOUTHWEST	THREE IRP SITES AND NINE AREAS OF		IRP	AD 04								
0001		DIVISION	CONCERN; PUBLIC REVIEW AND		RAP	AS 06								
			COMMENT PERIOD 1/2/00 THROUGH		RI	AS 08								
			1/31/00; PUBLIC MEETING 1/13/00			AST 02								
						AST 04								
						MDA 04								
						MDA 07								
						MMS 01								
						MWA 03								
						OU 2								
M62535 / 001793	04-18-2000	LOS ANGELES	PUBLIC NOTICE OF MEETING REGARDING	ADMIN RECORD	AOC	13E	SOUTHWEST							
NONE	01-06-2000	TIMES	NO FURTHER ACTION RECOMMENDATION		IRP	2	DIVISION							
MISC	NONE		PROPOSED PLAN/DRAFT REMEDIAL		OU	9								
NONE		VARIOUS	ACTION PLAN THREE IRP SITES AND NINE		RAB	AD 04								
0002			AREAS OF CONCERN; RESTORATION		RCRA	AS 06								
			ADVISORY BOARD (RAB) MEETING, 1/13/00			AS 08								
						AST 02								
						AST 04								
						MDA 07								
						MMS 01								
						MWA 03								
						OU 2								
						OU 4								

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M62535 / 001796	NONE	04-18-2000	ORANGE COUNTY REGISTER		01-06-2000								PUBLIC NOTICE OF MEETING REGARDING NO FURTHER ACTION RECOMMENDATION PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN THREE IRP SITES AND NINE AREAS OF CONCERN; RESTORATION ADVISORY BOARD (RAB) MEETING, 1/13/00	ADMIN RECORD	AOC BCT BRAC RAB RCRA	13E 2 9 AD 04 AS 06 AS 08 AST 02 AST 04 MDA 04 MDA 07 MMS 01 MWA 03 OU 2 OU 4	SOUTHWEST DIVISION

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M62535 / 001777	04-17-2000	BECHTEL	RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	AOC	1	SOUTHWEST										
CTO-0200/0017	01-13-2000	NATIONAL INC	MEETING, INCLUDES MEETING MINUTES	CONFIDENTIAL	AST	12	DIVISION										
MM	00200		OF 10/14/99, SIGN IN SHEET, AND MAILING	INFO	BCP	13E											
N68711-92-D-4670		NAVFAC -	LIST PARTS OF WHICH SHOULD BE	REPOSITORY	BRAC	13S											
0021		SOUTHWEST	CONSIDERED CONFIDENTIAL		FOSL	2											
		DIVISION			FS	3											
		R. SELBY			GW	9											
					IRP	AD 04											
					RAB	AS 06											
					RAP	AS 08											
					RCRA	AST 02											
					ROD	AST 04											
					SOIL	BLDG 149											
					TDU	BLDG 186											
					UST	BLDG 520											
					VOC	MDA 04											
						MDA 07											
						MMS 01											
						MWA 03											
						OU 1											
						OU 2											
						OU 3											
						OU 4											
						UST 105											
						UST 222											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001048	03-28-2000	OHM	DRAFT CLOSURE REPORT - SOIL	ADMIN RECORD	ARAR	9A	SOUTHWEST										
SW6335 &	01-21-2000	REMEDATION	REMOVAL ACTIONS AT HANGAR NO. 1,		COPC	9B	DIVISION										
SW6335.1	DO032	SERVICES CORP.	SUBAREAS 1 & 2; AND APRON 1,		DTSC	OU 2											
RPT		C. JOHNSON	SUBAREAS 1 & 3 (SEE AR #1701 -		EE/CA	ST- 47A											
N68711-93-D-1459		NAVFAC -	CONTRACTOR RESPONSE TO NAVY		IRP	ST- 47B											
0810		SOUTHWEST	COMMENTS & AR #1717 CONTRACTOR		PAH												
		DIVISION	RESPONSE TO EPA AND DTSC COMMENTS)		PCB												
		B. DEMAREE			SI												
					SOIL												
					TPH												
					TRPH												
					VOC												

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Doc. Control No.

Prc. Date

Author Affil.

Record Type

Record Date

Author

Contr./Guid. No.

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Recipient Affil.

Approx. # Pages

EPA Cat. #

Recipient

----- Subject -----

Classification

Keywords

Sites

Location

Box No.

M62535 / 001807

04-21-2000

BECHTEL

BCT MEETING MINUTES FOR JANUARY 13,
2000 - TUSTIN INSTALLATION
RESTORATION PROGRAM (IRP) AND RCRA
SITE CLOSURE (INCLUDES NOTICE OF
PUBLIC MEETING FOR 1/13/00)

ADMIN RECORD

DCE

11

SOUTHWEST

CTO-0187/0084

02-23-2000

NATIONAL INC

INFO

FOSL

12

DIVISION

MM

00187

NAVFAC -

SOUTHWEST
DIVISION

REPOSITORY

FS

13S

N68711-92-D-4670

IRP

13W

0071

R. SELBY

MTBE

3

PAH

5

ROD

5A

TCE

6

TCP

8

UST

9A

VOC

BLDG 189

WELLS

BLDG 199

BLDG 250

BLDG 28

BLDG 4

BLDG 50

BLDG 517

DSS 01

DSS 02

MDA 02

MMS 04

MMS 05

MWA 02

MWA 05

MWA 12

MWA 13

OU 1

OU 2

OU 3

OU 4

TOW 11

TOW 12

TOW 6

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001044	03-24-2000	BECHTEL	RESTORATION ADVISORY BOARD	ADMIN RECORD	AOC	11	SOUTHWEST										
CTO-200/0043	03-01-2000	NATIONAL INC.	MEETING; INCLUDES MEETING MINUTES	CONFIDENTIAL	FS	12	DIVISION										
MM	00200		OF JANUARY 13, 2000, MEETING SIGN-IN		IRP	13E											
N68711-92-D-4670		NAVFAC -	SHEETS, AND MAILING LIST PARTS OF		RAB	13S											
0017		SOUTHWEST	WHICH SHOULD BE CONSIDERED		RCRA	16											
		DIVISION	CONFIDENTIAL		UST	3											
		R. SELBY				5N											
						5S A											
						5S B											
						6											
						8											
						DSD 7											
						HANGAR 190											
						HANGAR 524											
						MWA 18											
						OCY 1											
						OU 1											
						OU 2											
						OU 3											
						OU 4											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000977	CTO-0141/0597	03-24-2000	BECHTEL	PLAN	03-14-2000	T. HEIRONIMUS	N68711-92-D-4670	00141	NAVAFAC - SOUTHWEST DIVISION	0170		R. SELBY	DRAFT RECORD OF DECISION / REMEDIAL ACTION PLAN - NO ACTION SITES AND AREAS OF CONCERN (REFERENCE AR #000729; PROPOSED DRAFT RAP & AVR #805 RESPONSE TO COMMENTS RE: RAP)	ADMIN RECORD	AOC DCA DDD DDE DDT FS IRP MEK PAH PCA PCB PCE RISK ASSESSME ROD SVOC SWMU TCA TCE TPH TRPH UST VOC VSI	AD 04 AS 06 AS 08 AST 02 AST 04 IRP 13E IRP 2 IRP 9A IRP 9B MDA 04 MDA 07 MMS 01 MWA 03 OU 2	SOUTHWEST DIVISION
M62535 / 000820	CTO-0200/0071	03-22-2000	BECHTEL	MM	05-18-2000	NATIONAL INC	N68711-92-D-4670	00200	NAVAFAC - SOUTHWEST DIVISION	0022		R. SELBY	RESTORATION ADVISORY BOARD (RAB) PRE-MEETING MATERIALS FOR MAY 18, 2000 MEETING INCLUDING: RAB MAILER, RAB MEETING NOTICE, AGENDAS, MARCH 9, 2000 MEETING MINUTES AND SIGN IN SHEETS, & MAILING LIST - PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL	ADMIN RECORD CONFIDENTIAL	AOC AST FS LF MONITORING MTBE RAB ROD	1 6 OU 2 OU 3 OU 4	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001693	SW8368	10-06-1998	OHM	RPT	05-18-2000	REMEDIAL SERVICES CORP	N68711-93-D-1459	DO032	C. JOHNSON	0700	03.4	NAVAFAC - SOUTHWEST DIVISION	DRAFT FINAL CLOSURE REPORT SOIL REMOVAL ACTIONS AT HANGAR NO. 1 LINE SHACKS, SUBAREAS 1 AND 2, APRON 1, SUBAREAS 1 AND 3, INCLUDING TEMPORARY STORAGE UNITS ST-40A, ST-40B, ST-40C, ST-43, ST-44, ST-47A, AND ST-47B	ADMIN RECORD INFO REPOSITORY	ARAR BCP BCT COPC EE/CA LUFT NFA NTCRA PAH PCB PRG QC RAP RCRA REMOVAL RISK SI SOIL SVOC TIC TPH TRPH VOC	9A 9B BLDG 178 BLDG 179 BLDG 201 BLDG 207 BLDG 260 BLDG 261 OU 2	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001781	04-17-2000	BECHTEL	DRAFT FINAL BASEWIDE ENVIRONMENTAL	ADMIN RECORD	AOC	1	SOUTHWEST DIVISION										
CTO-0085/0618	05-18-2000	NATIONAL INC.	BASELINE SURVEY	INFO	AOPC	11											
RPT	00085	T. SHERMAN		REPOSITORY	ASBESTOS	12											
N68711-92-D-4670		NAVFAC -			AST	13											
0600		SOUTHWEST			BCP	13E											
		DIVISION			BCT	13S											
					BRAC	13W											
					BTEX	16											
					CO	2											
					COPC	3											
					DCA	5											
					DCP	5N											
					EBS	5S											
					EE/CA	6											
					FOSL	8											
					FOST	9											
					FS	9A											
					GW	9B											
					HRA	OU 1											
					IAS	OU 2											
					LUFT	OU 3											
					MTBE	OU 4											
					NFA												
					PAH												
					PBR												
					PCB												
					PCE												
					PRG												
					RA												
					RCRA												
					RFA												
					RI												
					ROD												
					SI												
					SV												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001800	NONE	04-19-2000	IT GROUP/OHM	MEMO	05-18-2000	M. SMITH	N68711-93-D-1459	DO103	MCAF TUSTIN	0003		K. FORMAN	FINAL MEMORANDUM TO SUMMARIZE REMEDIAL ACTIVITIES - SCREENING RISK ASSESSMENT	ADMIN RECORD	SVE SVOC SWMU TCE TCP TPH TRPH TSDF UST VOC VSI ARSENIC CANCER COPC GW METALS NFA PAH PCB PRG RA RCRA RFA RISK ROD SOIL SOIL BORING TPH VOC	MWA 03 OU 2	SOUTHWEST DIVISION

AND UIC=M62535
No Keywords
Sites=OU 2

SPECIAL COLLECTION INDEX

OPERABLE UNIT 2

PUBLIC PARTICIPATION DOCUMENTS

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

MCAS Tustin

PUBLIC PARTICIPATION INDEX FOR MCAF TUSTIN

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M62535 / 001299		03-26-1997	COUNTY OF ORANGE		01-05-1984	R. BURK			IT CORPORATION				RESPONSE TO REQUEST FOR PUBLIC PROPERTY ENCROACHMENT PERMIT REQUEST FOR ADDITIONAL INFORMATION	ADMIN RECORD	PERMIT		SOUTHWEST DIVISION
PERM		NONE															
NONE		11.5															
0008																	
M62535 / 000203		10-06-1994	RWQCB RIVERSIDE		12-26-1984								NOTICE OF PUBLIC HEARING & APPLICATION FOR WASTE DISCHARGE REQUIREMENTS, STATEMENT OF POSTING & TENTATIVE ORDER #85-9(REF. DOC #000204)	ADMIN RECORD	MEDIA MOFF. PUB PART PUBLIC NOTICE PUBLIC PART.	00001 OU 3	SOUTHWEST DIVISION
CLTR		NONE															
NONE		01.0															
0001																	
M62535 / 000204		10-06-1994	MCAS TUSTIN		01-11-1985	B. VANCLEEF							STATEMENT OF POSTING NOTICE ENCLOSURE TO JB LEAP'S LETTER TO CRWQCB DATED JANUARY 14, 1985 REFERENCE DOCUMENT # 000205	ADMIN RECORD	MOFFETT TRENC WD	00001 OU 3	SOUTHWEST DIVISION
NOTE		NONE															
NONE		03.5															
0001																	
M62535 / 000205		10-06-1994	MCAS EL TORO		01-14-1985	J. B. LEAP							RESPONSE TO CRWQCB'S LETTER DATED DECEMBER 26, 1984 CONCERNING POSTING OF "NOTICE OF WASTE DISCHARGE ORDERNO.85-9" REF. DOC # 000203	ADMIN RECORD	MOFFETT TRENC WD	00001 OU 3	SOUTHWEST DIVISION
LTR		NONE															
NONE		03.5															
0001																	
M62535 / 000261		10-06-1994	U.S. MARINE CORPS		02-08-1985								NOTICE OF PUBLIC HEARING AND APPLICATION FOR WASTE DISCHARGE REQUIREMENTS	ADMIN RECORD	MEDIA MOFF. PUB PART PERMIT PUBLIC PART.	00001 OU 3	SOUTHWEST DIVISION
NOTE		NONE															
NONE		10.3															
0001																	

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M62535 / 000086 GUID NONE 0002	10-06-1994 03-05-1985 NONE 01.1	CNO DON MCAS TUSTIN DISTRIBUTION	MEMO TO ENSURE THE CONFORMITY OF ALL NAMED INSTALLATIONS CONCERNING THE RELEASE OF NACIP STUDIES TO THE PUBLIC (HAZWASTE SITE CLEANUP)	NON-ADMIN RECORD	HAZ WASTE		SOUTHWEST DIVISION
M62535 / 000494 NEWS NONE 0002	05-31-1995 04-08-1985 NONE 10.3	LA TIMES G.M. BUSH PUBLIC	NEWSPAPER ARTICLE "TWO CHEMICAL SPILLS POUR POLLUTANTS INTO UPPER NEWPORT BAY"	ADMIN RECORD	ARTICLE MOFF. PUB PART PUBLIC PART.		SOUTHWEST DIVISION
M62535 / 000495 NEWS NONE 0001	05-31-1995 04-08-1985 NONE 10.3	O.C. REGISTER A. SNOW PUBLIC	NEWSPAPER ARTICLE "SPILLED SOLVENT KILLS FISH IN THE UPPER BAY: LEAK IS TRACED TO TUSTIN AIR STATION"	ADMIN RECORD	ARTICLE MOFF. PUB PART PUBLIC PART. SOLVENTS		SOUTHWEST DIVISION
M62535 / 000496 NEWS NONE 0001	05-31-1995 04-08-1985 NONE 10.3	O.C. REGISTER C. LACHNIT PUBLIC	NEWSPAPER ARTICLE "SOLVENT FLOW IS MOST RECENT CONTAMINATION OF UPPER BAY"	ADMIN RECORD	ARTICLE MOFF. PUB PART PUBLIC PART. SOLVENTS		SOUTHWEST DIVISION
M62535 / 000492 NEWS NONE 0001	05-31-1995 04-09-1985 NONE 10.3	LA TIMES D. PALERMO PUBLIC	NEWSPAPER ARTICLE "MARINES CRITICIZED AFTER SPILL INTO BAY"	ADMIN RECORD	ARTICLE MEDIA MOFF. PUB PART PUBLIC PART.		SOUTHWEST DIVISION
M62535 / 000493 NEWS NONE 0002	05-31-1995 04-09-1985 NONE 10.3	O.C. REGISTER M. CONE PUBLIC	NEWSPAPER ARTICLE "SPILL HAD BUILT UP AT MARINE BASE"	ADMIN RECORD	ARTICLE MEDIA MOFF. PUB PART PUBLIC PART.		SOUTHWEST DIVISION

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M62535 / 000252	10-06-1994	CRWQCB SANTA ANA	HEARING-CONSIDER ACTION OF TIME SCHED FOR COMPLIANCE IN CLEANUP/ABATEMENT ORDER 85-15885-74 FOR CLEANUP OF DISCHARGE OF POLLUTANTS FROM "BURNING PITS" @ BASE	ADMIN RECORD	AO	00001	SOUTHWEST DIVISION							
PROC	10-11-1985				CRASH BURN PIT	OU 3								
NONE	NONE	MCAS TUSTIN			MOFFETT TRENC									
0017	07.3													
M62535 / 000450	04-18-1995	RWQCB-SANTA ANA	NOTICE OF PUBLIC FORUM FOR USMC MCAS TUSTIN REMEDIAL ACTION PLAN MOFFETT TRENCHES AND CRASH CREW PITS (DATE ASSUMED; MEETING HELD MARCH 3, 1987)	ADMIN RECORD	CRASH BURN PIT	00001	SOUTHWEST DIVISION							
MISC	03-13-1987	J. BENNETT			IRP	OU 3								
NONE	NONE	MCAS TUSTIN			MOFF. PUB PART									
0004	10.5				MOFFETT TRENC									
					PUBLIC NOTICE									
					RA									
M62535 / 000230	10-06-1994	WESTERN S. S. SUNDERLAND	NOTICE TO ALL CONCERNED: UPCOMING SEPTEMBER 25, 1987 MEETING; RESULTS OF PRELIMINARY FIELD TESTING CONDUCTED AROUND FUEL FARM AREA TO BE PRESENTED	ADMIN RECORD	FUEL FARM	00016	SOUTHWEST DIVISION							
LTR	09-14-1987	IRWD			MEDIA									
NONE	NONE	L. HOWARD			PUBLIC PART.									
0001	03.5													
M62535 / 000260	10-06-1994	CRWQCB	NOTICE OF PUBLIC FORUM REMEDIAL ACTION PLAN MOFFETT TRENCHES AND CRASH CREW PITS (YEAR OF ISSUE KNOWN)	ADMIN RECORD	COMM REL	00001	SOUTHWEST DIVISION							
NOTE	12-31-1987				MOFF. PUB PART	OU 3								
NONE	NONE				MOFFETT TRENC									
0004	10.3				PERMIT									
					PUBLIC NOTICE									
M62535 / 001296	03-26-1997	SOUTHWEST DIVISION	NOTICE OF MEETING TO DISCUSS THE WORK COMPLETED AT THE FUEL FARM	ADMIN RECORD	FUEL		SOUTHWEST DIVISION							
LTR	01-05-1988	S. SUNDERLAND			MEDIA									
NONE	NONE	VARIOUS AGENCIES			PUBLIC PART.									
0008	10.5													
M62535 / 001070	07-24-1996	CITY OF TUSTIN	PRELIMINARY CITY OF TUSTIN JAMBOREE ROAD EXTENSION, DEPARTMENT OF PUBLIC WORKS	ADMIN RECORD	MOFFETT TRENC	OU 3	SOUTHWEST DIVISION							
DWG	02-17-1988	BECHTEL												
NONE	NONE	NATIONAL												
0006	00.0													

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M62535 / 001294		03-26-1997	MCAS EL TORO										REQUEST FOR REPRESENTATIVES TO ESTABLISH A TECHNICAL REVIEW COMMITTEE (TRC) AS REQUIRED BY THE SUPERFUND AMMENDMENTS AND REAUTHORIZATIONS ACT OF 1986 (SARA)	ADMIN RECORD	MOFF. PUB PART PUBLIC PART. TRC		SOUTHWEST DIVISION
LTR		03-31-1988	S. HOLM														
NONE		NONE	CRWQCB - SANTA ANA														
0004		11.3															
M62535 / 000379		12-20-1994	TRC										TECHNICAL REVIEW COMMITTEE ROSTER FOR BOTH EL TORO AND TUSTIN	ADMIN RECORD	MOFF. PUB PART PUBLIC PART. TRC	00013	SOUTHWEST DIVISION
MISC		04-27-1988	MCAS TUSTIN														
NONE		NONE															
0001		01.1															
M62535 / 001290		03-26-1997	MCAS EL TORO										SECOND REQUEST FOR COMMENTS ON THE CONFIRMATION STUDY WORK PLAN AND FOR A DESIGNATED INDIVIDUAL TO BECOME A MEMBER OF THE TECHNICAL REVIEW COMMITTEE	ADMIN RECORD	COMMENTS CONFIRM. STUDY MOFF. PUB PART PUBLIC PART. TRC WORKPLANS		SOUTHWEST DIVISION
LTR		07-12-1988	S. HOLM														
NONE		NONE	RWQCB - SA														
0001		10.1	J. BENNETT														
M62535 / 000377		12-20-1994	TRC										TRC MEETING MINUTES (HANDWRITTEN) - BASIC REVIEW OF FUEL FARM AREA REMEDIAL INVESTIGATION	ADMIN RECORD	FUEL MTG MINS PUBLIC PART. REMEDIAL INVES RI TRC	00016	SOUTHWEST DIVISION
NOTE		09-29-1988	MCAS TUSTIN														
NONE		NONE															
0001		10.4															
M62535 / 000373		12-20-1994											WRITTEN STATUS OF THE CORRECTIVE ACTIONS ON THE FACILITY NOTICE OF NONCOMPLIANCE (NON)	ADMIN RECORD	PCB		SOUTHWEST DIVISION
LTR		10-28-1988	R F WEMHEUER														
NONE		NONE	GREG														
0035		01.1	CZAJKOWSKI														
M62535 / 000313		10-06-1994	US EPA SAN FRANCISCO										A GUIDE TO DEVELOPING SUPERFUND PROPOSED PLANS DIR. 9335.3-02FS-2	ADMIN RECORD	MOFF. GUID TECH/GUID/DOC.		SOUTHWEST DIVISION
GUID		05-01-1990															
NONE		NONE															
0002		11.1															

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M62535 / 000255		10-06-1994	EPA SAN FRANCISCO	LTR	08-06-1990	J. ZELIKSON							COVER LETTER AND NOTICE OF NONCOMPLIANCE EPA ID # CA0170090022	ADMIN RECORD	NON		SOUTHWEST DIVISION
	NONE	07.7	MCAS TUSTIN														
	0019		P. S. JOHNSON														
M62535 / 000365		12-19-1994	JACOBS ENGINEERING	MISC	03-20-1991								TECHNICAL REVIEW COMMITTEE MEETING AGENDA FOR MARCH 201991 MEETING	ADMIN RECORD	COMM REL		SOUTHWEST DIVISION
	NONE	10.4	SOUTHWEST DIVISION												MOFF. PUB PART		
	0001														PUBLIC PART.		
															TRC		
M62535 / 000303		10-06-1994	EPA SAN FRANCISCO	GUID	04-01-1991								GUIDE TO ADDRESSING PRE-ROD AND POST-ROD CHANGES PUB. 9355.3-02FS-4	ADMIN RECORD	GUIDE		SOUTHWEST DIVISION
	NONE	11.1															
	0003																
M62535 / 000304		10-06-1994	US EPA SAN FRANCISCO	GUID	04-01-1991								GUIDE TO DEVELOPING SUPERFUND NO ACITON, INTERIM ACTION, AND CONTINGENCY REMEDY RODS PUB 9355.3-02FS-3	ADMIN RECORD	MOFF. GUID		SOUTHWEST DIVISION
	NONE	11.1													TECH/GUID/DOC.		
	0003																
M62535 / 000292		10-06-1994	US EPA SAN FRANCISCO	GUID	07-01-1991								ARARS QS & AS: GENERAL POLICY: RCRA, CWA, SDWA, POST-ROD INFORMATION AND CONTINGENT WAIVERS PUB. 9234.2-01/FS-A	ADMIN RECORD	MOFF. GUID		SOUTHWEST DIVISION
	NONE	11.1													TECH/GUID/DOC.		
	0004																
M62535 / 000273		10-06-1994	EPA SAN FRANCISCO	GUID	08-01-1991								STRUCTURE AND COMPONENTS OF FIVE-YEAR REVIEWS QUICK REFERENCE FACT SHEET DIR. 9355.7-02FSI	ADMIN RECORD	GUIDE		SOUTHWEST DIVISION
	NONE	11.1															
	0001																

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M62535 / 000974 GUID NONE 0100	07-02-1996 10-02-1991 NONE 00.0	USEPA	FEDERAL AND STATE AGENCIES ADMINISTRATIVE RECORD WORKSHOP	NON-ADMIN RECORD	AR INDEX		SOUTHWEST DIVISION
M62535 / 000274 GUID NONE 0003	10-06-1994 09-01-1992 NONE 11.1	US EPA SAN FRANCISCO	SUPERFUND FACT SHEET: EXPOSURE PATHWAYS PUB 9230.0-05FSB	ADMIN RECORD	GUIDE MOFF. GUID TECH/GUID/DOC.		SOUTHWEST DIVISION
M62535 / 000275 GUID NONE 0002	10-06-1994 09-01-1992 NONE 11.1	US EPA SAN FRANCISCO	SUPERFUND FACT SHEET: TRICHLOROETHYLENE PUB 9230.0-5FSC	ADMIN RECORD	MOFF. GUID TECH/GUID/DOC.		SOUTHWEST DIVISION
M62535 / 000276 GUID NONE 0002	10-06-1994 09-01-1992 NONE 11.1	US EPA SAN FRANCISCO	SUPERFUND FACT SHEET: ARSENIC PUB. 9230.0-05FSA	ADMIN RECORD	MOFF. GUID TECH/GUID/DOC.		SOUTHWEST DIVISION
M62535 / 000278 GUID NONE 0002	10-06-1994 09-01-1992 NONE 10.6		SUPERFUND FACT SHEET: BENZENE PUB. 9230.0-05FSD	ADMIN RECORD	MOFF. GUID TECH/GUID/DOC.		SOUTHWEST DIVISION
M62535 / 000280 GUID NONE 0002	10-06-1994 09-01-1992 NONE 11.1	US EPA SAN FRANCISCO	SUPERFUND FACT SHEET: PCBS PUB. 9230.0-05FSI	ADMIN RECORD	MOFF. GUID TECH/GUID/DOC.		SOUTHWEST DIVISION

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M62535 / 000285	10-06-1994	US EPA SAN	ARARS FACT SHEET COMPLIANCE WITH	ADMIN RECORD	MOFF. GUID									SOUTHWEST
	09-01-1992	FRANCISCO	CLEAN AIR ACT AND ASSOCIATED AIR		TECH/GUID/DOC.									DIVISION
GUID	NONE		QUALITY REQUIREMENTS PUB. 9234.2-22FS											
NONE	11.1													
0014														
M62535 / 000288	10-06-1994	US EPA SAN	SUPERFUND FACT SHEET: AN OVERVIEW	ADMIN RECORD	MOFF. GUID									SOUTHWEST
	09-01-1992	FRANCISCO	PUB. 9230.0-05FSH		TECH/GUID/DOC.									DIVISION
GUID	NONE													
NONE	11.1													
0002														
M62535 / 000294	10-06-1994	US EPA SAN	SUPERFUND FACT SHEET: IDENTIFYING	ADMIN RECORD	MOFF. GUID									SOUTHWEST
	09-01-1992	FRANCISCO	SITES PUB. 9234.0-05FSK		TECH/GUID/DOC.									DIVISION
GUID	NONE													
NONE	11.1													
0002														
M62535 / 001021	07-18-1996	NAVFACECOM	PUBLIC LAW 102-426-OCTOBER 19, 1992	ADMIN RECORD	CERFA									SOUTHWEST
	10-19-1992	D.CHANDLER	COMMUNITY ENVIRONMENTAL RESPONSE		COMM REL									DIVISION
N/A	NONE		FACILITATION ACT		MOFF. GUID									
NONE	00.0				PUBLIC PART.									
0020														
M62535 / 001022	07-18-1996	SOUTHWEST	PUBLIC LAW 102-426-OCT. 19,1992	ADMIN RECORD	CERFA									SOUTHWEST
	10-19-1992	DIVISION	COMMUNITY ENVIRONMENTAL RESPONSE											DIVISION
BCP	NONE	D. CHANDLER	FACILITATION ACT											
NONE	11.3	BECHTEL												
0040		NATIONAL												

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M62535 / 001032		07-18-1996	DTSC LONG BEACH		12-18-1992	C. BEST			MCAS TUSTIN				REVIEWED FACT SHEET WITH COMMENTS	ADMIN RECORD	COMMENTS	00001	SOUTHWEST DIVISION
FACT		NONE													FACT SHEET	00002	
NONE		11.2													HAZ WASTE	00003	
0010															MOFF. PUB PART	00004	
															PUBLIC PART.	00005	
																00006	
																00007	
																00008	
																00010	
																00011	
																00012	
																00013	
																00014	
																00015	
																OU 3	
M62535 / 000262		10-06-1994	SOUTHWEST DIVISION		02-05-1993	R. ROYAL			JACOBS ENGINEERING				GOVERNMENT COMMENTS ON DRAFT FACT SHEET	NON-ADMIN RECORD	COMM REL COMMENTS		SOUTHWEST DIVISION
GUID		NONE															
NONE		10.6															
0009																	
M62535 / 001028		07-18-1996	USEPA		02-15-1993	J. WYLAND			CITY OF TUSTIN				USEPA:REVIEW OF NOTICE OF INTENT TO PREPARE A DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROJECT ENTITLED REUSE AND DISPOSAL OF MCAS TUSTIN	ADMIN RECORD	CEQA DISPOSAL		SOUTHWEST DIVISION
LTR		NONE													EIS		
NONE		11.2													NEPA		
0013															REUSE		

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M62535 / 000263		10-06-1994	IT CORPORATION									COMM REL	00001	SOUTHWEST DIVISION
		02-17-1993	R. SMITH									FACT SHEET	00002	
FACT		00244	SOUTHWEST									MOFF. PUB PART	00003	
N68711-89-D9696		10.6	DIVISION									OPERABLE UNIT	00004	
0006			R. GREEN									PUBLIC PART.	00005	
													00006	
													00007	
													00008	
													00009	
													00010	
													00012	
													0013W	
													OU 1	
													OU 2	
													OU 3	
M62535 / 000115		10-06-1994	JACOBS									DATA	00001	SOUTHWEST DIVISION
CLE-I02-01F244-I2-		02-22-1993	ENGINEERING									MOFFETT TRENC	00013	
0002		00244	GROUP									OPERABLE UNIT	00066	
MEMO		01.2	R. SMITH									PUBLIC	0016A	
N68711-89-D-9696			VARIOUS									TECHNICAL DOC.	0016B	
0005			AGENCIES										0016C	
													MAE 4	
													MWA 23	
													OU 1	
													OU 3	
													TOW 15	
													TOW 16	
M62535 / 000162		10-06-1994	SOUTHWEST									REMOVAL		SOUTHWEST DIVISION
		03-12-1993	DIVISION									TEH		
MEMO		NONE	L. NUZUM											
NONE		02.5	JACOBS											
0002			ENGINEERING											

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M62535 / 000044	05-10-1994	SWDIV/JACOBS	REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 1	ADMIN RECORD	OPERABLE UNIT	OU 1	SOUTHWEST DIVISION							
WKPL	06-28-1993				REMEDIAL INVES									
N68711-89-D9296	00244				WORKPLANS									
0500	03.3													
M62535 / 000182	10-06-1994	IT CORPORATION	DRAFT - REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 1	ADMIN RECORD	MOFFETT TRENC	00001	SOUTHWEST DIVISION							
WKPL	08-06-1993	R. SMITH			OPERABLE UNIT	00003								
N68711-89-D9296	00244	SOUTHWEST DIVISION			PUBLIC	00012								
0270	03.3	R. GREEN			REMEDIAL INVES	00013								
					TECHNICAL DOC.	OU 1								
						OU 1A								
						OU 1B								
						OU 1C								
						OU 3								
M62535 / 001054	07-24-1996	MCAS EL TORO	TECNICAL REVIEW COMMITTEE REVIEW OF REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 1, DRAFT, DATED AUGUST 6, 1993	ADMIN RECORD	REMEDIAL INVES	OU 1	SOUTHWEST DIVISION							
LTR	08-20-1993	L.G. SERAFINI			TRC									
NONE	NONE	DTSC LONG BEACH												
0002	01.0	C. BEST												
M62535 / 000220	12-15-1999	JACOBS	DRAFT - HEALTH AND SAFETY PLAN FOR OPERABLE UNIT 1 REMEDIAL INVESTIGATION	ADMIN RECORD	AOC	OU 1	SOUTHWEST DIVISION							
CLE-102-01F244-B4	08-27-1993	ENGINEERING GROUP			GW									
0001	00244	R. SMITH			H&SP									
PLAN	03.5	SOUTHWEST DIVISION			SOIL									
N68711-89-D-9296														
0195														
M62535 / 001279	03-17-1997		LIST OF TUSTIN TEAM BUILDING WORKSHOP ATTENDEES	ADMIN RECORD			SOUTHWEST DIVISION							
MEMO	10-19-1993													
NONE	NONE													
0001	10.5													

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M62535 / 001033 LTR NONE 0001	07-18-1996 10-29-1993 NONE 10.0	CITY OF TUSTIN W. HUSTON MCAS EL TORO MAJ. A. MURPHY	APPOINTMENT TO RESTORATION ADVISORY BOARD	ADMIN RECORD	MOFF. PUB PART PUBLIC PART. RAB		SOUTHWEST DIVISION
M62535 / 001589 COMM NONE 0011	02-26-1998 11-10-1993 00049 10.1	DTSC LONG BEACH M. IBRAHIM SOUTHWEST DIVISION D. CHANDLER	DTSC AND CRWQCB REVIEW OF THE DRAFT REMEDIAL INVESTIGATION AND HEALTH AND SAFETY PLAN FOR OPERABLE UNIT 1	ADMIN RECORD	COMMENTS GROUNDWATER IRP MOFFETT TRENC REMEDIAL INVES	00003 00012 00016 0013E 0013W 0016C OU 1 OU 3 PARCEL 1	SOUTHWEST DIVISION
M62535 / 001025 REUS NONE 0002	07-18-1996 11-23-1993 NONE 10.3	TUSTIN M. WYNN PUBLIC	PUBLIC NOTICE: MCAS TUSTIN RE-USE PLAN COMMUNITY WORKSHOP RE-USE ALTERNATIVES	ADMIN RECORD	COMM REL PUBNOT REUSE		SOUTHWEST DIVISION
M62535 / 000549 MM NONE 0075	06-29-1995 11-30-1993 NONE 10.5	CITY OF TUSTIN C. SHINGLETON	BASE CLOSURE TASK FORCE MINUTES AND PLANS COMMUNITY WORKSHOP	ADMIN RECORD	MOFF. PUB PART PUBLIC PART.		SOUTHWEST DIVISION
M62535 / 001056 NEWS NONE 0001	07-24-1996 01-20-1994 NONE 10.3	O.C. REGISTER PUBLIC	PUBLIC NOTICE - FORMATION OF RESTORATION ADVISORY BOARD MEMBERSHIP SOLICITATION	ADMIN RECORD	MEDIA MOFF. PUB PART PUBLIC PART. RAB		SOUTHWEST DIVISION
M62535 / 000476 MISC NONE 0001	05-30-1995 01-21-1994 NONE 10.3	TUSTIN NEWS MARY E. WYNN PUBLIC	PUBLIC NOTICE - CITY OF TUSTIN BASE CLOSURE TASK FORCE MEETING MARCH 3, 1994	ADMIN RECORD	COMM REL MEDIA MOFF. PUB PART PUBLIC PART.		SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000949	06-28-1996	MCAS TUSTIN	PUBLIC NOTICE ANNOUNCING FEBRUARY 24, 1994 PUBLIC MEETING SCHEDULED FOR FORMATION OF RESTORATION ADVISORY BOARD AND SOLICITATION OF RAB MEMBERS	ADMIN RECORD	MEDIA	00001	SOUTHWEST DIVISION										
MISC	02-09-1994	PUBLIC			MOFF. PUB PART	00002											
NONE	NONE				PUBLIC NOTICE	00003											
0001	10.3				PUBLIC PART.	00004											
					RAB	00005											
						00006											
						00007											
						00008											
						00009											
						00010											
						00011											
						00012											
						00013											
						00014											
						00015											
						00016											
						OU 1											
						OU 2											
						OU 3											
M62535 / 001058	07-24-1996	TUSTIN WEEKLY	PUBLIC NOTICE- FORMATION OF RESTORATION ADVISORY BOARD SOLICITATION	ADMIN RECORD	MEDIA		SOUTHWEST DIVISION										
NEWS	02-18-1994	PUBLIC			PUBLIC PART.												
NONE	NONE				RAB												
0001	10.3																
M62535 / 001057	07-24-1996	AC/S ENVIR & SAFETY	PUBLIC NOTICE - FORMATION OF RESTORATION ADVISORY BOARD, MEMBERSHIP SOLICITATION	ADMIN RECORD	MOFF. PUB PART		SOUTHWEST DIVISION										
NEWS	02-25-1994	A. CHASIN			PUBLIC PART.												
NONE	NONE	PUBLIC			RAB												
0001	10.3																
M62535 / 001052	07-24-1996	U.S. NAVY	GUIDANCE - ESTABLISHMENT OF RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	MOFF. GUID		SOUTHWEST DIVISION										
DOD	03-01-1994				RAB												
NONE	NONE				TECH/GUID/DOC.												
0030	11.6																

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M62535 / 001285		03-26-1997 03-10-1994	SOUTHWEST DIVISION	MEMO		L. HOLLOWAY							MEMO-REMEDIAL PROJECT MANAGERS MEETING NOTICE AND AGENDA	ADMIN RECORD	MEMO		SOUTHWEST DIVISION
NONE		NONE				VARIOUS											
0003		10.5				AGENCIES											
M62535 / 001282		03-17-1997 04-01-1994	SOUTHWEST DIVISION	NOTE		L. HOLLOWAY							CANCELLED MEETING NOTICE FOR APRIL 18, 1994 MEETING RE-SCHEDULED TO APRIL 20 -21, 1994	ADMIN RECORD	MEMO		SOUTHWEST DIVISION
NONE		NONE				VARIOUS											
0001		10.5															
M62535 / 001284		03-26-1997 04-07-1994	SOUTHWEST DIVISION	LTR		L. HOLLOWAY							MEMO-REGARDING CALIFORNIA BASE CLOSURE ENVIRONMENTAL COMMITTEE MEETING NOTICE	ADMIN RECORD	BRAC CLOSURE MEMO		SOUTHWEST DIVISION
NONE		NONE				VARIOUS											
0008		10.5				AGENCIES											
M62535 / 001283		03-26-1997 04-11-1994	SOUTHWEST DIVISION	LTR		L. HOLLOWAY							MEMORANDUM - DATA QUALITY OBJECTIVE MEETING NOTICE	ADMIN RECORD	MEMO		SOUTHWEST DIVISION
NONE		NONE				DISTRUBUTION											
0004		10.5															
M62535 / 000940		06-28-1996 04-25-1994	MCAS TUSTIN W. HAMMERLE	LTR		RAB							LETTER ACCEPTING L. HOLLOWAY AS A MEMBER OF THE RESTORATION ADVISORY BOARD (RAB), INCLUDES COMPLETE LIST OF RAB MEMBERS	ADMIN RECORD	PUBLIC PART. RAB		SOUTHWEST DIVISION
NONE		NONE				L. HOLLOWAY											
0010		10.0															
M62535 / 000941		06-28-1996 04-25-1994	MCAS TUSTIN W. HAMMERLE	LTR		RAB							LETTER ACCEPTING MEMBER OF PUBLIC AS THE RESTORATION ADVISORY BOARD (RAB) COMMUNITY CO-CHAIR	ADMIN RECORD	PUBLIC PART. RAB		SOUTHWEST DIVISION
NONE		NONE				J. TUCKER											
0010		10.0															

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Record Type	Record Date	Author						
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.	
M62535 / 000809	05-17-1996	SOUTHWEST	MINUTES & OTHER MATERIAL FROM MAY	ADMIN RECORD	COMM REL	00013	SOUTHWEST	
	05-05-1994	DIVISION	5, 1994 RAB MEETING (ALSO AVAILABLE IN		MTG MINS		DIVISION	
MM	00063	L. HOLLOWAY	RAB ARCHIVES BINDER DOCUMENT #		PUBLIC PART.			
N68711-92-D4670	01.1	RAB MEMBERS	000682)		RAB			
0030		PUBLIC						
M62535 / 000462	05-23-1995	SUNRISE	LETTER RE: ACCESS TO BFM ENERGY	NON-ADMIN			SOUTHWEST	
	05-20-1994	BARRY RODGERS	PRODUCTS CORPORATION	RECORD			DIVISION	
LTR	NONE	SWDIV						
NONE	3.6	L. HOLLOWAY						
0001								
M62535 / 001558	02-17-1998	O.C. REGISTER	NEWSPAPER ARTICLE "CIVILIAN JOB CUTS	ADMIN RECORD	CLOSURE		SOUTHWEST	
	05-20-1994		LOOM AT MARINE STATIONS" (NO		MEDIA		DIVISION	
NEWS	NONE	PUBLIC	LAYOFFS ARE EXPECTED, BUT FUNDING					
NONE	10.3		PROBLEMS WILL DELAY CLOSING OF					
0001			TUSTIN AND EL TORO)					
M62535 / 001559	02-17-1998	LA TIMES	NEWSPAPER ARTICLE "STANDING TALL-	ADMIN RECORD	MEDIA		SOUTHWEST	
	06-17-1994		TUSTIN BLIMP HANGARSHONORED AS				DIVISION	
NEWS	NONE	PUBLIC	FEATS OF ENGINEERING"					
NONE	10.3							
0002								
M62535 / 000264	10-06-1994	IT CORPORATION	FINAL (UPDATE) FACT SHEET #2 "NEW	ADMIN RECORD	COMM REL		SOUTHWEST	
	06-21-1994	R. SMITH	ENVIRONMENTAL TO HOLD WORKSHOP"	INFO	FACT SHEET		DIVISION	
FACT	NONE	SOUTHWEST		REPOSITORY	PUBLIC PART.			
NONE	10.6	DIVISION			RAB			
0004		R. GREEN						
M62535 / 001037	07-18-1996	DON	NOTICE OF INTENT TO PREPARE AN	NON-ADMIN	DISPOSAL		SOUTHWEST	
	06-27-1994	R.W. WATKINS	ENVIRONMENTAL IMPACT	RECORD	EIS		DIVISION	
LTR	NONE	MCAS TUSTIN	STATEMENT/ENVIRONMENTAL IMPACT		REUSE			
NONE	01.0	GENERAL STAFF	REPORT FOR THE DISOSAL AND REUSE					
0008			OF MCAS TUSTIN					

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M62535 / 000944		06-28-1996	BECHTEL										MEETING MINUTES FROM JUNE 24 - 25, 1994 RESTORATION ADVISORY BOARD (RAB) WORKSHOP, INCLUDES BRIEF SITE UPDATES AND LIST OF MEETING ATTENDEES	ADMIN RECORD	MOFF. PUB PART	00001	SOUTHWEST DIVISION
		06-29-1994	NATIONAL													00002	
MISC		NONE														00003	
NONE		10.4	RAB													00004	
0010																00005	
																00007	
																00008	
																00009	
																00012	
																00013	
																00016	
																OU 3	
M62535 / 001560		02-17-1998	O.C. REGISTER										NEWSPAPER ARTICLE "TUSTIN - SIXTY-NINE PEOPLE HAVE BEEN SELECTED TO BE ON THE RESTORATION ADVISORY BOARD FOR TUSTIN MARINE CORPS AIR STATION"	ADMIN RECORD	MEDIA		SOUTHWEST DIVISION
		06-29-1994															
NEWS		NONE	PUBLIC														
NONE		10.6															
0001																	
M62535 / 000856		06-05-1996	U.S. NAVY										RESTORATION ADVISORY BOARD WORKSHOP GUIDEBOOK: STRATEGY FOR IMPLEMENTING JOINT DOD AND USEPA GUIDELINES ON RABS - DATE ASSUMED	ADMIN RECORD	MOFF. GUID		SOUTHWEST DIVISION
		06-30-1994															
MISC		NONE															
NONE		01.1															
0200																	
M62535 / 000942		06-28-1996	MCAS TUSTIN										LETTER TRANSMITTING RESTORATION ADVISORY BOARD WORKSHOP MATERIALS TO DTSC, MATERIALS NOT INCLUDED	ADMIN RECORD	MOFF. PUB PART	00001	SOUTHWEST DIVISION
		07-06-1994	W. HAMMERLE													OU 3	
LTR		NONE	DTSC														
NONE		10.0	C. BEST														
0002																	

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M62535 / 001062		07-24-1996	ADVANCED SCIENCES		07-06-1994	W. HAMMERLE							JUNE 24-25, 1996 RAB WORKSHOP MEETING MINUTES AND AGENDA	ADMIN RECORD	MOFF. PUB PART	00001	SOUTHWEST DIVISION
MM		NONE														00002	
NONE		10.5	DISTR													00003	
0010																00004	
																00005	
																00007	
																00008	
																00009	
																00012	
																00013	
																00016	
																OU 3	
M62535 / 000808		05-17-1996	SOUTHWEST DIVISION		07-14-1994	L. HOLLOWAY							MINUTES AND OTHER MATERIAL FROM JULY 14, 1994 RAB MEETING (ALSO AVAILABLE IN RAB ARCHIVES BINDER - DOCUMENT # 000682)	ADMIN RECORD	COMM REL	00001	SOUTHWEST DIVISION
MM		00063														00002	
N68711-92-D4670		01.1	RAB MEMBERS													00003	
0020			PUBLIC													00004	
																00005	
																00006	
																00007	
																00008	
																00009	
																00010	
																00011	
																00012	
																00013	
																00014	
																00015	
																00016	
																OU 3	
M62535 / 001561		02-17-1998	O.C. REGISTER		07-23-1994								NEWSPAPER ARTICLE "MARINES TO STAY IN TUSTIN TILL '98"(FUNDING TO EXPEDITE THE MOVE WENT TO HELP VICTIMS OF THE NORTHRIDGE QUAKE)	ADMIN RECORD	MEDIA		SOUTHWEST DIVISION
NEWS		NONE															
NONE		10.3	PUBLIC														
0001																	

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M62535 / 000458 GUID PUB9355.08FS 0015	05-23-1995 07-28-1994 NONE 11.1	USEPA	SUPERFUND REMEDY IMPEMNTATION GUIDE: THERMAL DESORPTION TREATMENT QUICK REFERENCE FACT SHEET	ADMIN RECORD	GUIDE TDT		SOUTHWEST DIVISION
M62535 / 000946 LTR NONE 0011	06-28-1996 08-01-1994 NONE 10.0	MCAS TUSTIN L. HOLLOWAY MCAS TUSTIN W. HAMMERLE	MEETING MINUTES FROM JULY 14, 1995 RESTORATION ADVISORYBOARD (RAB) MEETING AND PROJECT DELIVERABLE LIST	ADMIN RECORD	MTG MINS PUBLIC PART. RAB		SOUTHWEST DIVISION
M62535 / 000604 SAPL N68711-89-D9296 0075	08-22-1995 09-01-1994 00210 01.1	JACOBS N. ACEDERA SWDIV	***** MARINE CORPS AIR STATION YUMA, ARIZONA, OPERABLE UNIT 2 FIELD SAMPLING PLAN DRAFT FINAL	NON-ADMIN RECORD	CERCLA DQOP FSP RCRA UST	OU 2	SOUTHWEST DIVISION
M62535 / 001562 NEWS NONE 0001	02-19-1998 09-10-1994 NONE 10.3	LA TIMES PUBLIC	NEWSPAPER NOTICE "THE TUSTIN MARINE CORPS AIR STATION IS HOSTING AN OPEN HOUSE FROM 8 A.M. TO 4 P.M. SUNDAY"	ADMIN RECORD	MEDIA		SOUTHWEST DIVISION
M62535 / 001361 GUID NONE 0025	05-07-1997 09-27-1994 NONE 11.6	DOD S. GOODMAN RAB MEMBERS	RESTORATION ADVISORY BOARD (RAB) IMPLEMENTATION GUIDELINES SEPTEMBER 1994	ADMIN RECORD	GUIDE PUBLIC PART. RAB		SOUTHWEST DIVISION
M62535 / 000614 COMM NONE 0010	08-22-1995 09-29-1994 NONE 01.1	DTSC A. ARELLANO, JR USMC W. LEE	**** DTSC COMMENTS ON DRAFT OPERABLE UNIT 1 (OU#1) BASELINE HUMAN HEALTH RISK ASSESSMNT REPORT FOR MCAS EL TORO	ADMIN RECORD	COMMENTS EL TORO HA OU RA USEPA		SOUTHWEST DIVISION

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M62535 / 000810		05-17-1996	SOUTHWEST		10-06-1994	DIVISION							MINUTES AND OTHER MATERIAL FROM OCTOBER6, 1994 RAB MEETING (ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT #000682)	ADMIN RECORD	COMM REL	00001	SOUTHWEST
MM		00063	D. CHANDLER												MOFF. PUB PART	00013	DIVISION
N69811-92-D4670		01.1	RAB MEMBERS												MTG MINS	00016	
0015			PUBLIC												PUBLIC PART.	OU 3	
															RAB		
M62535 / 001061		07-24-1996	DTSC LONG		10-21-1994	BEACH							LETTER CONCERNING SEVERAL PUBLIC PARTICIPATION ISSUES ASSOOCIATED WITH REMEDIAL ACTIVITIES	ADMIN RECORD	IRP		SOUTHWEST
LTR		NONE	J. WHITEN												PUBLIC PART.		DIVISION
NONE		10.1	MCAS TUSTIN														
0003			D. CHANDLER														
M62535 / 000811		05-17-1996	SOUTHWEST		11-03-1994	DIVISION							MINUTES & OTHER MATERIAL FROM NOVEMBER 3, 1994 RAB MEETING (ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT #000682)	ADMIN RECORD	COMM REL	00001	SOUTHWEST
MM		00063	D. CHANDLER												MOFF. PUB PART	00013	DIVISION
N68711-92-D4670		01.1	RAB MEMBERS												MTG MINS	00016	
0025			PUBLIC												PUBLIC PART.	OU 3	
															RAB		
M62535 / 001060		07-24-1996	REGISTER		11-03-1994								PUBLIC NOTICE - RESTOATION ADVISORY BOARD PUBLIC MEETING	ADMIN RECORD	MEDIA	00001	SOUTHWEST
NEWS		NONE	PUBLIC												MOFF. PUB PART	00016	DIVISION
NONE		10.3													MOFFETT TRENC	OU 3	
0001															PUBLIC PART.		
M62535 / 001515		12-29-1997	EPA		01-01-1995	WASHINGTON, DC							GROUNDWATER SAMPLING - A WORKSHOP SUMMARY, DALLAS, TEXAS NOVEMBER 30-DECEMBER 2, 1993	NON-ADMIN RECORD	GROUNDWATER SAMPLING		SOUTHWEST
MISC		NONE															DIVISION
NONE		10.0															
0100																	
M62535 / 000812		05-17-1996	SOUTHWEST		01-24-1995	DIVISION							MINUTES & OTHER MATERIAL FROM JANUARY 24, 1995 RAB MEETING (ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT #000682)	ADMIN RECORD	COMM REL	00013	SOUTHWEST
MM		00063	D. CHANDLER												MTG MINS	00016	DIVISION
N68711-92-D4670		01.1	RAB MEMBERS												PUBLIC PART.	0016A	
0040			PUBLIC												RAB		

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M62535 / 000690 FACT N68711-92-D4670 0002	01-08-1996 02-01-1995 00063 01.1	USMC A. CHASIN PUBLIC	TUSTIN FACT SHEET #3: FEBRUARY 1995: "SOIL TREATMENT PROCESS SELECTED FOR CLEANUP OF FORMER FUEL FARM AREA" (PG. 1 HEADLINE)	ADMIN RECORD	COMM REL FACT SHEET PUBLIC PART.	00001 0016A 0016C OU 3	SOUTHWEST DIVISION
M62535 / 001053 LTR NONE 0001	07-24-1996 02-14-1995 NONE 10.0	RAB MEMBER L. HILLYER MCAS EL TORO A. CHASIN	RESIGNATION FROM MCAS TUSTIN RESTORATION ADVISORY BOARD	ADMIN RECORD	RAB		SOUTHWEST DIVISION
M62535 / 000813 MM N68711-92-D4670 0050	05-17-1996 02-22-1995 00063 01.1	SOUTHWEST DIVISION D. CHANDLER RAB MEMBERS PUBLIC	MINUTES AND OTHER MATERIAL FROM FEBRUARY 22, 1995 RAB MEETING (ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT #000682)	ADMIN RECORD	COMM REL MTG MINS PUBLIC PART. RAB	00011 00013 00016	SOUTHWEST DIVISION
M62535 / 000579 CTO-0049/0072 WKPL N68711-92-D-4670 0500	07-18-1995 03-01-1995 00049 01.1	BECHTEL NATIONAL W. MYERS SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 1 AND OPERABLE UNIT 2 MARINE CORPS AIR STATION TUSTIN (INCLUDES DRAFT BACKGROUND SOILS & GROUNDWATER WORK PLAN), VOLUME 1, VOLUME 2 = DOCUMENT #000580	ADMIN RECORD	MOFFETT TRENC REMEDIAL INVES TECHNICAL DOC. WORKPLANS	00003 00005 00007 00012 00013 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
M62535 / 000580 CTO-0049/0072 WKPL N68711-92-D-4670 0500	07-18-1995 03-01-1995 00049 01.1	BECHTEL NATIONAL W. MYERS SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNITS 1 AND 2 (INCLUDES DRAFT BACKGROUND SOILS & GROUNDWATER WORK PLAN), VOLUME 2, VOLUME 1 = DOCUMENT #000579	ADMIN RECORD	MOFFETT TRENC REMEDIAL INVES TECHNICAL DOC. WORKPLANS	00003 00005 00007 00012 00013 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION

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Record Type	Record Date	Author						
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Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.	
M62535 / 001068	07-24-1996	DOD	RAB LETTER REGARDING MEMBERSHIP	ADMIN RECORD	PUBLIC PART.		SOUTHWEST	
	03-10-1995	D. CHANDLER	INTENTIONS		RAB		DIVISION	
LTR	NONE	PUBLIC						
NONE	00.0	P. CIESLA						
0001								
M62535 / 001364	05-07-1997	O.C. REGISTER	PUBLIC NOTICE REGARDING A	ADMIN RECORD	MEDIA		SOUTHWEST	
	04-11-1995		RESTORATION ADVISORY BOARD		PUBLIC NOTICE		DIVISION	
MISC	NONE	PUBLIC	MEETING ON APRIL 13 1995		PUBLIC PART.			
NONE	10.3				RAB			
0001								
M62535 / 000814	05-17-1996	SOUTHWEST	MINUTES & OTHER MATERIAL FROM APRIL	ADMIN RECORD	COMM REL	00001	SOUTHWEST	
	04-13-1995	DIVISION	13, 1995 RAB MEETING (ALSO AVAILABLE		MOFF. PUB PART	00013	DIVISION	
MM	00063	D. CHANDLER	IN RAB ARCHIVES BINDER DOCUMENT		MTG MINS	OU 3		
N68711-92-D4670	01.1	RAB MEMBERS	#000682)		PUBLIC PART.			
0040		PUBLIC			RAB			
M62535 / 001365	05-07-1997	O.C. REGISTER	PUBLIC NOTICE REGARDING A	ADMIN RECORD	MEDIA		SOUTHWEST	
	05-21-1995		RESTORATION ADVISORY BOARD		PUBLIC NOTICE		DIVISION	
MISC	NONE	PUBLIC	MEETING ON MAY 31 1995		PUBLIC PART.			
NONE	10.3				RAB			
0001								
M62535 / 000619	08-22-1995	US EPA SAN	USEPA COMMENTS ON DRAFT FIELD	ADMIN RECORD	COMMENTS	00013	SOUTHWEST	
	05-25-1995	FRANCISCO	SAMPLING PLAN, DRAFT REMEDIAL		FSP	OU 1	DIVISION	
COMM	00049	D. HODGES	INVESTIGATION WORK PLAN FOR		MOFFETT TRENC	OU 2		
NONE	01.1	SOUTHWEST	OPERABLE UNIT 1 AND OPERABLE UNIT 2		OPERABLE UNIT	OU 3		
0006		DIVISION			REMEDIAL INVES			
		J. PAYNE			SAMPLING			
					TECHNICAL DOC.			
					USEPA			
					WORKPLANS			
M62535 / 001055	07-24-1996	PUBLIC	MEMBERSHIP APPLICATION FOR	ADMIN RECORD	PUBLIC PART.		SOUTHWEST	
	05-25-1995		RESTORATION ADVISORY BOARD,		RAB		DIVISION	
LTR	NONE	RAB MEMBERS	SEVERAL APPLICATIONS					
NONE	10.0							
0080								

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Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001363	05-07-1997	O.C. REGISTER	PUBLIC NOTICE REGARDING RESTORATION ADVISORY BOARD (RAB) MEETING, MAY 31, 1995	ADMIN RECORD	PUBLIC							PUBLIC NOTICE RAB		SOUTHWEST DIVISION
MISC	05-28-1995													
NONE	NONE	PUBLIC												
0001	10.3													
M62535 / 000815	05-17-1996	SOUTHWEST DIVISION	MINUTES & OTHER MATERIAL FROM MAY 31, 1995 RAB MEETING(ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT # 000682)	ADMIN RECORD	COMM REL							00001		SOUTHWEST DIVISION
MM	05-31-1995	D. CHANDLER										MOFF. PUB PART	00003	
N68711-92-D4670	00063	RAB MEMBERS										MTG MINS	00005	
0015	01.1	PUBLIC										PUBLIC PART.	00007	
												RAB	00012	
													00013	
													00016	
													OU 1	
													OU 2	
													OU 3	
M62535 / 001541	04-10-2000	NAVFAC - SOUTHWEST DIVISION	NOTICE OF RESTORATION ADVISORY BOARD (RAB) MEETING OF JUNE 22, 1995; INCLUDES: DRAFT AND FINAL AGENDA OF MEETING, VARIOUS HANDOUTS, & MEETING MINUTES OF RAB MEETING OF 6/22/95	ADMIN RECORD	BCP							00001		SOUTHWEST DIVISION
NONE	06-22-1995											BRAC		
MM	NONE											RAB		
NONE		NAVFAC - SOUTHWEST DIVISION												
0022														
M62535 / 000817	05-17-1996	SOUTHWEST DIVISION	MINUTES AND OTHER MATERIAL FROM JULY 20, 1995 RAB MEETING (ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT #000682)	ADMIN RECORD	COMM REL							00013		SOUTHWEST DIVISION
MM	07-20-1995	D. CHANDLER										MTG MINS	AREA 22	
N68711-92-D4670	00063	RAB MEMBERS										PUBLIC PART.		
0040	01.1	PUBLIC										RAB		
M62535 / 000818	05-17-1996	SOUTHWEST DIVISION	ANNOUNCEMENT/INVITATION TO THERMAL DESORPTION UNIT TOUR (ALSO AVAILABLE IN RAB ARCHIVES BINDER DOCUMENT # 000682)	ADMIN RECORD	COMM REL							00016		SOUTHWEST DIVISION
MISC	07-28-1995	D. CHANDLER										PUBLIC PART.		
N68711-92-D4670	00063	RAB MEMBERS										RAB		
0001	01.1											TDU		

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M62535 / 000819		05-17-1996	SOUTHWEST										ANNOUNCEMENT OF NO 8-95 GENERAL	ADMIN RECORD	COMM REL	00001	SOUTHWEST
		08-01-1995	DIVISION										MTG; ANNOUNCEMENT OF RI/FS		FEASIBILITY STU.	00003	DIVISION
MISC		00063	VARIOUS										SUBCOMMITTEE MEETING AUGUST 22,		MOFF. PUB PART	00005	
N68711-92-D4670		01.1	RAB MEMBERS										1995 (ALSO AVAILABLE IN RAB ARCHIVES		PUBLIC PART.	00007	
0001			PUBLIC										BINDER DOC# 000682)		RAB	00012	
															REMEDIAL INVES	00013	
																00016	
																OU 1	
																OU 2	
																OU 3	
M62535 / 001360		05-07-1997	MCAS TUSTIN										NOTICE TO RAB MEMBERS THAT THERE	ADMIN RECORD	FEASIBILITY STU.		SOUTHWEST
		08-22-1995											WILL NOT BE A RAB MEETING IN AUGUST		PUBLIC PART.		DIVISION
WKPL		NONE	RAB MEMBERS										1995 HOWEVER AN RI/FS SUBCOMMITTEE		RAB		
NONE		10.3											MEETING WILL BE HELD TO HIGHLIGHT		REMEDIAL INVES		
0001													CURRENT ACTIVITIES				
M62535 / 001369		05-07-1997	MCAS TUSTIN										RESPONSE TO RESTORATION ADVISORY	ADMIN RECORD	DATA		SOUTHWEST
		09-11-1995	D. CHANDLER										BOARD (RAB) DATA CALL		RAB		DIVISION
LTR		NONE	COMMANDING														
NONE		10.0	OFFICER														
0006			M. POTACKA														
M62535 / 000417		06-25-1996	IUSD										IRVINE UNIFIED SCHOOL DISTRICT	ADMIN RECORD	PUBLIC PART.		SOUTHWEST
		09-18-1995	C. LOSKOT										REQUEST PUBLIC BENEFIT CONVEYANCE				DIVISION
LTR		NONE	TUSTIN														
NONE		01.1	C. SHINGLETON														
0001																	
M62535 / 000700		01-26-1996	SOUTHWEST										MCAS TUSTIN AND MCAS EL TORO	ADMIN RECORD	PUBLIC PART.		SOUTHWEST
		09-20-1995	DIVISION										RESTORATION ADVISORY BOARD		RAB		DIVISION
MEMO		00063	C. WIEMERT										MEMBERSHIP RECRUITMENT (PUBLIC				
N68711-92-D4670		10.3	PUBLIC										NOTICE)				
0005			OC REGISTER														

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Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001046	03-27-2000	MCAS TUSTIN								PUBLIC NOTICE OF RESTORATION	ADMIN RECORD	EBS	1	SOUTHWEST DIVISION
NONE	09-22-1995									ADVISORY BOARD MEETING OF	CONFIDENTIAL	FOST	12	
MM	NONE	NAVFAC -								THURSDAY, SEPTEMBER 21, 1995		RAB	13E	
NONE		SOUTHWEST								INCLUDES MEETING MINUTES, VARIOUS		RCRA	13W	
0041		DIVISION								HANDOUTS, SIGN-IN SHEETS, AND			16	
										MAILING LIST - PARTS OF WHICH SHOULD			3	
										BE CONSIDERED CONFIDENTIAL			5N	
													5S	
													7N	
													7S	
M62535 / 001563	02-19-1998	O.C. REGISTER								NEWSPAPER ARTICLE "HEATING FOR A	ADMIN RECORD	CLEANUP		SOUTHWEST DIVISION
	10-16-1995									CLEANUP - LOW TECH ISIN FASHION AT		FUEL		
NEWS	NONE	PUBLIC								THE TUSTIN MARINE BASE, WHERE SOIL-		MEDIA		
NONE	10.3									HEATING TECHNOLOGY IS SAVING MONEY		SOIL		
0004										ON CLEANUP BILLS"				
M62535 / 001564	02-19-1998	IRVINE WORLD								NEWSPAPER ARTICLE "MARINES	ADMIN RECORD	FUEL		SOUTHWEST DIVISION
	10-21-1995	NEWS								CLEANING UP 40 YEARS OF		MEDIA		
NEWS	NONE									CONTAMINATION - FUTURE HOME SITE		REUSE		
NONE	10.3	PUBLIC								SITS ON 75,000 TONS OF TOXIC SOIL"		SOIL		
0002														
M62535 / 000699	01-26-1996	BECHTEL								MEMO TO TUSTIN CTOLS: DISTRIBUTION	NON-ADMIN	COMM REL		SOUTHWEST DIVISION
	10-31-1995	NATIONAL								OF DRAFT DOCUMENTS TO RESTORATION	RECORD	RAB		
MEMO	00063	S. ALLIONE								ADVISORY BOARD (RAB) SUBCOMMITTEES				
N68711-92-D4670	01.1	BECHTEL												
0015		NATIONAL												
		CTOLS												
M62535 / 000933	06-28-1996	BECHTEL								LETTER TRANSMITTING SUMMARY OF	ADMIN RECORD	COMM REL		SOUTHWEST DIVISION
CTO-0063/0167	11-01-1995	NATIONAL								CHANGES AND EDITS TO RESTORATION		PUBLIC PART.		
MISC	00063	A. SCHWARTZ								ADVISORY BOARD (RAB) SURVEY		RAB		
N68711-92-D-4670	10.0	SWDIV												
0008		P. KENNEDY												

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M62535 / 001565		02-19-1998 11-02-1995											NEWSPAPER ARTICLE "TUSTIN CLEANS UP SOIL WITH NEW SYSTEM"	ADMIN RECORD	CLEANUP MEDIA SOIL		SOUTHWEST DIVISION
NEWS		NONE	PUBLIC														
NONE		10.3															
0002																	
M62535 / 001566		02-19-1998 11-02-1995											NEWSPAPER ARTICLE "CLEAN DIRT FOR TUSTIN"	ADMIN RECORD	CLEANUP MEDIA SOIL		SOUTHWEST DIVISION
NEWS		NONE	PUBLIC														
NONE		10.3															
0001																	
M62535 / 000936		06-28-1996 11-08-1995	RAB G. HURLEY										*** LTR. FROM RAB MEMBER REQUESTING SWDIV RESPONSE TO CITY OF IRVINE LETTER WRITTEN REGARDING EE/CA FOR SITES 7, 11, 13, 14, 19, AND 20 (EL TORO)	NON-ADMIN RECORD	EE/CA EL TORO RAB	00007 00011 00013 00014 00019 00020	SOUTHWEST DIVISION
LTR		NONE	SWDIV														
NONE		10.1	J. JOYCE														
0001																	
M62535 / 001205		03-05-1997 11-08-1995	RAB MEMBER G. HURLEY										RAB'S RESPONSE TO CITY OF IRVINE'S LETTER OF SEPTEMBER 12, 1995 REGARDING REVISING DRAFT EE/CA	ADMIN RECORD	EL TORO RAB	00007 00011 00013 00014 00019 00020	SOUTHWEST DIVISION
RESP		NONE	SOUTHWEST DIVISION														
NONE		10.1	J. JOYCE														
0001																	
M62535 / 000937		06-28-1996 11-16-1995	BECHTEL NATIONAL										***DRAFT AGENDA & PUBLIC NOTICE FOR NOVEMBER 30, 1995 RAB MEETING - DRAFT MEETING MINUTES FROM OCTOBER 10, 1995 AND NOVEMBER MAILING LIST (EL TORO)	NON-ADMIN RECORD	EL TORO MTG MINS PUBNOT RAB		SOUTHWEST DIVISION
MISC		0063B	D. COWSER														
N6871192D467000		10.0	SOUTHWEST DIVISION														
0015			P. KENNEDY														
M62535 / 001198		03-04-1997 11-21-1995	DTSC LONG BEACH										COMMENTS ON FACT SHEET #5 REMEDIAL INVESTIGATION/BCT AND GENERAL STATUS	ADMIN RECORD	BCT COMMENTS FACT SHEET PUBLIC PART. REMEDIAL INVES		SOUTHWEST DIVISION
COMM		NONE	M. MINGAY														
NONE		3.6	VARIOUS AGENCIES														
0005																	

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M62535 / 000689		01-08-1996	USMC							FACT SHEET #4 - MCAS TUSTIN: "IT'S OFFICIAL: EXCAV- ATION AND TREATMENT OF CONTAMINATED SOIL IS UNDER WAY"	ADMIN RECORD	COMM REL	AREA 169	SOUTHWEST
FACT		12-01-1995	C. WIEMERT									FACT SHEET	AREA 170	DIVISION
N68711-92-D4670		00063	PUBLIC									PUBLIC PART.	AREA 22	
0004		01.1										REMOVAL	BLDG. 248	
M62535 / 000969		06-28-1996	BECHTEL							LETTER TRANSMITTING DRAFT	ADMIN RECORD	TECHNICAL DOC.	00016	SOUTHWEST
		12-07-1995	NATIONAL							REPLACEMENT COPIES OF THE SUMMARY			OU 2	DIVISION
MISC		00049	H. MASRI							DATA PACKAGES FOR SITES 13W, AND 16			PARCEL 13W	
N6871192D467000		01.1	SOUTHWEST							UNDER OPERABLE UNIT 2				
0005			DIVISION											
			P. KENNEDY											
M62535 / 000723		02-07-1996	OCEMA							*** EL TORO LOCAL REDEVELOPMENT	NON-ADMIN	EL TORO		SOUTHWEST
		12-21-1995								AUTHORITY: PRELIMINARYNON-AVIATION	RECORD	REUSE		DIVISION
RPT		NONE	PUBLIC							CONCEPTS REPORT: MCAS EL TORO				
NONE		00.0								REUSE PLANRPT. NO. 1				
0040														
M62535 / 000950		06-28-1996	TUSTIN NEWS							PUBLIC NOTICE ANNOUNCING JANUARY 9,	ADMIN RECORD	CLOSURE	00001	SOUTHWEST
		12-28-1995	P. STOKER							1996 BASE CLOSURE TASK FORCE		MEDIA	00002	DIVISION
MISC		NONE	PUBLIC							MEETING		MOFF. PUB PART	00003	
NONE		10.0										PUBLIC NOTICE	00004	
0001												PUBLIC PART.	00005	
													00006	
													00007	
													00008	
													00009	
													00010	
													00011	
													00012	
													00013	
													00014	
													00015	
													00016	
													OU 1	
													OU 2	
													OU 3	

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M62535 / 000719	01-30-1996	MCAS TUSTIN	FACT SHEET #5 JANUARY 1996 "FAST-TRACK STUDIES FOCUS ON REDUCING COST AND SCHEDULE "	ADMIN RECORD	COMM REL	00001	SOUTHWEST	
	01-01-1996	C. WIEMERT			FACT SHEET	00003	DIVISION	
FACT	00063	PUBLIC			PUBLIC PART.	00005		
N68711-92-D4670	01.1					00007		
0006						00012		
						00013		
						00016		
						0007N		
						0007S		
						0013E		
						0013W		
						OU 3		
M62535 / 001567	02-19-1998	O.C. REGISTER	NEWSPAPER ARTICLE "BASE HOUSING - FOR THE HOMELESS - PLANS FOR THE TUSTIN AIR STATION INCLUDE A PARK, SHELTERS AND FOUR SCHOOLS"	ADMIN RECORD	BCT		SOUTHWEST	
	01-09-1996				CLOSURE		DIVISION	
NEWS	NONE	PUBLIC			MEDIA			
NONE	10.3							
0001								
M62535 / 001569	02-19-1998	O.C. REGISTER	NEWSPAPER ARTICLE "IRVINE AND TUSTIN HAVE ANOTHER PIECE OF LAND TO DIVVY UP"	ADMIN RECORD	MEDIA		SOUTHWEST	
	01-10-1996				PARCEL		DIVISION	
NEWS	NONE	PUBLIC						
NONE	10.3							
0001								
M62535 / 001570	02-19-1998	O.C. REGISTER	NEWSPAPER ARTICLE "TUSTIN BASE PANEL MAKES RECOMMENDATIONS FOR USE"	ADMIN RECORD	MEDIA		SOUTHWEST	
	01-10-1996						DIVISION	
NEWS	NONE	PUBLIC						
NONE	10.3							
0001								
M62535 / 001182	12-12-1996	MCAS TUSTIN	PUBLIC NOTICE REVISION REGARDING OPERABLE UNIT 3 PUBLIC REVIEW AND COMMENT PERIOD EXTENDED PLUS NOTICE OF PUBLIC MEETING	ADMIN RECORD	MEDIA	00001	SOUTHWEST	
	01-11-1996				MOFF. PUB PART	OU 3	DIVISION	
NEWS	NONE	PUBLIC			PUBLIC NOTICE			
NONE	10.3				PUBLIC PART.			
0023								

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M62535 / 001190 MM NONE 0011	01-13-1997 01-17-1996 NONE 10.4	SOUTHWEST DIVISION RAB MEMBERS	JANUARY 17, 1996 RESTORATION ADVISORY BOARD MEETING MINUTES	ADMIN RECORD	MOFF. PUB PART MTG MINS PUBLIC PART. RAB	00001 OU 3	SOUTHWEST DIVISION
M62535 / 000724 RPT NONE 0150	02-07-1996 01-25-1996 NONE 00.0	OCEMA PUBLIC	*** EL TORO LOCAL REDEVELOPMENT AUTHORITY: PRELIMINARY AVIATION MARKET ASSESSMENT: MCAS EL TORO REUSE PLAN REPORT NUMBER 2	ADMIN RECORD	EL TORO REUSE		SOUTHWEST DIVISION
M62535 / 000868 LTR N68711-92-D4670 0002	06-10-1996 02-14-1996 0063A 01.1	BECHTEL NATIONAL A. SCHWARTZ CALTRANS R. NEILSON	LETTER RESPONDING TO REQUEST FOR FACT SHEETS	ADMIN RECORD	COMM REL FACT SHEET PUBLIC PART.		SOUTHWEST DIVISION
M62535 / 001571 NEWS NONE 0001	02-19-1998 03-02-1996 NONE 10.3	O.C. REGISTER PUBLIC	NEWSPAPER ARTICLE "PREPARING FOR THE WORST"	ADMIN RECORD	MEDIA		SOUTHWEST DIVISION
M62535 / 000838 MM N68711-92-D4670 0000	07-02-1996 03-26-1996 0063A 10.3	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION P. KENNEDY	RESTORATION ADVISORY BOARD MARCH 20, 1996 PRE- AND POST MEETING PACKAGES (PUBLIC NOTICE, AGENDA, SIGN-IN SHEETS)	ADMIN RECORD	COMM REL MOFF. PUB PART PUBLIC NOTICE PUBLIC PART. RAB	00001 00003 00012 00013 00016 0005N 0005S 0007N 0007S	SOUTHWEST DIVISION

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M62535 / 000839 CTO-0063/0229 MM N68711-92-D4670 0010	05-21-1996 03-26-1996 0063A 10.4	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION P. KENNEDY	MINUTES AND OTHER MATERIAL FROM JANUARY 17, 1996 RESTORATION ADVISORY BOARD MEETING	ADMIN RECORD INFO REPOSITORY	COMM REL MTG MINS PUBLIC PART. RAB		SOUTHWEST DIVISION	
M62535 / 001083 MM N68711-92-D-4670 0012	08-27-1996 04-11-1996 0063A 10.4	BECHTEL NATIONAL SWDIV P. KENNEDY	RESTORATION ADVISORY BOARD POST- MEETING MATERIAL MARCH 20, 1996	ADMIN RECORD	MOFF. PUB PART MTG MINS PUBLIC PART. RAB	00001 00003 00012 00016 0005N 0005S 0007N 0007S 0013E 0013W OU 3	SOUTHWEST DIVISION	
M62535 / 001462 LTR NONE 0001	11-11-1997 04-19-1996 NONE 10.0	U.S. NAVY L.F. SCHRIEFER DISTRUBUTION	LETTER FORWARDING IMPORTANT INFORMATION DIRECTLY TO RESTORATION ADVISORY BOARDS (RABS)	ADMIN RECORD	CLEANUP RAB		SOUTHWEST DIVISION	
M62535 / 000840 COMM N68711-92-D4670 0040	05-21-1996 04-22-1996 00063 01.1	SOUTHWEST DIVISION D. CHANDLER SOUTHWEST DIVISION T. MARTIN	REQUEST FOR RESPONSE TO RAB MEMBER COMMENTS ON EE/CA FOR IRP 13W (W/RAB MEMBER COMMENTS)	ADMIN RECORD	EE/CA PUBLIC PART. RAB	0013W	SOUTHWEST DIVISION	
M62535 / 000828 CTO-0063/0308 MISC N68711-92-D4670 0010	05-21-1996 05-08-1996 0063A 10.4	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION P. KENNEDY	MAY 22, 1996 RESTORATION ADVISORY BOARD PRE-MEETING MATERIAL AND APRIL 18, 1996 RAB POST-MEETING MATERIAL (MINUTES)	ADMIN RECORD	COMM REL EE/CA MTG MINS PUBLIC PART. RAB	13W	SOUTHWEST DIVISION	

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M62535 / 000633		06-25-1996	MCAS TUSTIN							PUBLIC NOTICE FOR MAY 22, 1996 RAB MEETING	ADMIN RECORD	EE/CA MEDIA PUBLIC PART. RAB	PARCEL 13W SOUTHWEST DIVISION	
MISC		0063A	C. WIEMERT											
N68711-92-D4670		01.1	PUBLIC											
0001														
M62535 / 000866		06-10-1996	BECHTEL							PUBLIC NOTICE FOR 13 WEST EE/CA	ADMIN RECORD	COMM REL EE/CA MEDIA	PARCEL 13W SOUTHWEST DIVISION	
CTO-0063/0319		06-03-1996	NATIONAL											
MISC		0063A	VARIOUS											
N68711-92-D4670		01.1	SOUTHWEST DIVISION											
0002			P. KENNEDY											
M62535 / 000865		06-10-1996	BECHTEL							RESTORATION ADVISORY BOARD JUNE 22, 1996 TOUR ANNOUNCEMENT	ADMIN RECORD	COMM REL MOFF. PUB PART PUBLIC PART. RAB	00001 00002 00003 00004 00005 00006 00007 00008 00009 00010 00012 00013 00014 00015 00016 OU 1 OU 2 OU 3	SOUTHWEST DIVISION
MISC		0063A	NATIONAL											
N68711-92-D4670		10.3	H. MASRI											
0002			SOUTHWEST DIVISION											
			P. KENNEDY											

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M62535 / 001378	05-12-1997	MCAS TUSTIN	RAB MEMBERS COMMENTS ON THE	ADMIN RECORD	COMMENTS	PARCEL 11A	SOUTHWEST	
	06-10-1996	D. CHANDLER	DRAFT PESTICIDES INVESTIGATION		EBS	PARCEL 33	DIVISION	
COMM	NONE	SOUTHWEST	REPORT AND ENVIRONMENTAL BASLEINE		PESTICIDES	PARCEL 38		
NONE	10.1	DIVISION	SURVEY(EBS) FOR PARCELS 6 8B 11A 33		PUBLIC PART.	PARCEL 39		
0006		T. MARTIN	38 39 41A AND 41B		RAB	PARCEL 41A		
						PARCEL 41B		
						PARCEL 6		
						PARCEL 8B		
M62535 / 000232	06-20-1996	BECHTEL	RESPONSE TO COMMENTS (FROM BCT	ADMIN RECORD	EE/CA	0013W	SOUTHWEST	
	06-13-1996	NATIONAL	AND RAB) ON DRAFT IRP-13W EE/CA		RAB		DIVISION	
RESP	00049	H. MASRI			TECHNICAL DOC.			
N68711-92-D4670	01.1	VARIOUS						
0008		AGENCIES						
M62535 / 001149	10-21-1996	NEWSPAPERS	NEWSPAPER ARTICLES. PUBLIC NOTICE	ADMIN RECORD	MEDIA		SOUTHWEST	
	06-13-1996		OF AVAILABILITY AT INFORMATION		MOFF. PUB PART		DIVISION	
NEWS	NONE	PUBLIC	REPOSITORY AT UC IRVINE		PUBLIC NOTICE			
NONE	10.3				PUBLIC PART.			
0030								
M62535 / 001406	06-16-1997	MCAS TUSTIN	PUBLIC NOTICE FOR CLEANUP PROPOSED	ADMIN RECORD	CLEANUP	0013W	SOUTHWEST	
	06-14-1996	D. CHANDLER	FOR FORMER DRUM STORAGE AREA		COMMENTS		DIVISION	
NOTE	NONE	PUBLIC	IRP13W - INVITATION FOR THE PUBLIC TO		DRUMS			
NONE	10.3		REVIEW AND COMMENT ON THE EE/CA		MEDIA			
0001					PUBLIC PART.			
M62535 / 000321	12-16-1999	BECHTEL	RESTORATION ADVISORY BOARD POST-	ADMIN RECORD	LF	13W	SOUTHWEST	
	06-19-1996	NATIONAL INC	MEETING MATERIALS FROM MAY 22, 1996		MTG MINS		DIVISION	
CTO-0063/0310		H. MASRI	RAB MEETING		RAB			
MM	00063	RAB MAILING LIST			SOIL			
N68711-92-D-4670	10.4							
0010								
M62535 / 000991	07-10-1996	BECHTEL	BASE HOUSING NOTICE FOR 13W EE/CA	ADMIN RECORD	EE/CA	0013W	SOUTHWEST	
	06-24-1996	NATIONAL	CONTAINS CONFIDENTIAL INFORMATION	CONFIDENTIAL	PUBLIC PART.		DIVISION	
CTO-0063/0341		H. MASRI		DOC				
EECA	0063A	SOUTHWEST						
N68711-92-D-4670	02.4	DIVISION						
0040		P. KENNEDY						

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M62535 / 001002		07-10-1996	REGISTER										PUBLIC NOTICE COAST GUARD HOUSING REQUEST COULD QUASH MARINE TUSTIN BASE REUSE PLAN	ADMIN RECORD	REUSE		SOUTHWEST DIVISION
NEWS		06-25-1996	G.STEWART														
NONE		NONE	TUSTIN														
0001		10.6	COMMUNITY MEMBER														
M62535 / 001385		05-14-1997	MCAS TUSTIN										PUBLIC COMMENTS REGARDING EE/CA SITE 13W DRUM STORAGE AREA #3 - LETTER FROM RESIDENT OUTLINING SOME DIFFICULTIES EXPERIENCED DURING BASE CLEANUP	ADMIN RECORD	CLEANUP EE/CA PUBLIC COMMEN PUBLIC PART.	0013W	SOUTHWEST DIVISION
COMM		07-03-1996	D. CHANDLER														
NONE		NONE	SOUTHWEST DIVISION														
0003		10.1	T. MARTIN														
M62535 / 001389		05-14-1997	MCAS TUSTIN										REQUEST FOR REVIEW AND COMMENT ON THE DRAFT REMEDIAL INVESTIGATION AND FEASIBILITY STUDY FOR OPERABLE UNIT 3 WITHOUT ENCLOSURE	ADMIN RECORD	COMMENTS FS OPERABLE UNIT REMEDIAL INVES	OU 3	SOUTHWEST DIVISION
LTR		07-03-1996	D. CHANDLER														
NONE		NONE	VARIOUS AGENCIES														
0001		03.4															
M62535 / 001105		08-27-1996	BECHTEL										DRAFT REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 3, VOLUMES 1 AND 2	ADMIN RECORD	MOFFETT TRENC OPERABLE UNIT REMEDIAL INVES TECHNICAL DOC.	00001 OU 3	SOUTHWEST DIVISION
CTO-0049/0559		07-08-1996	NATIONAL														
RPT		00049	K. BELGARDE														
N68711-92-D-4670		00.0	SOUTHWEST DIVISION														
0200																	
M62535 / 001041		07-22-1996	BECHTEL										LETTER TO THE REGULATORS REGARDING DRAFT REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORTS FOR OPERABLE UNIT 3 (W/O ENCLOSURE)	ADMIN RECORD	FEASIBILITY STU. MOFFETT TRENC OPERABLE UNIT REMEDIAL INVES	00001 OU 3	SOUTHWEST DIVISION
CTO-		07-09-1996	NATIONAL														
0049/0732/0725*		00049	H. MASRI														
LTR		01.0	SOUTHWEST DIVISION														
N68711-92-D-4670			P.KENNEDY														
0002																	
M62535 / 001076		07-31-1996	BECHTEL										DRAFT FEASIBILITY STUDY REPORT FOR OPERABLE UNIT 3	ADMIN RECORD	FEASIBILITY STU. MOFFETT TRENC OPERABLE UNIT TECHNICAL DOC.	00001 OU 3	SOUTHWEST DIVISION
CTO-0049/0558		07-10-1996	NATIONAL														
RPT		00049	H. MASRI														
N68711-92-D-4670		00.0	SOUTHWEST DIVISION														
0100			P. KENNEDY														

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Record Type	Record Date	Author						
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.	
M62535 / 001727 RPT N68711-92-D-4670 0100	01-10-1999 07-10-1996 00049 03.0	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION P. KENNEDY	DRAFT REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 3, JULY 1996 VOLUME 1 OF 2	ADMIN RECORD	MOFFETT TRENC REMEDIAL INVES	MCAS	SOUTHWEST DIVISION	
M62535 / 001271 LTR NONE 0025	03-17-1997 07-12-1996 NONE 10.0	DTSC LONG BEACH M. MINGAY MCAS TUSTIN D. CHANDLER	COMPILING OF RAB SURVEY RESULTS	ADMIN RECORD	BCT PUBLIC PART. RAB SURVEY		SOUTHWEST DIVISION	
M62535 / 001273 LTR NONE 0002	03-17-1997 07-16-1996 NONE 10.1	EPA SAN FRANCISCO D. HODGES VARIOUS AGENCIES	DELAY IN SUBMITTING COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR OPERABLE UNIT 3	ADMIN RECORD	COMMENTS FEASIBILITY STU. MOFFETT TRENC OPERABLE UNIT REMEDIAL INVES	OU 3	SOUTHWEST DIVISION	
M62535 / 001051 NOTE N68711-92-D-4670 0010	07-24-1996 07-17-1996 00063 10.3	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION P. KENNEDY	PUBLIC NOTICE - RESTORATION ADVISORY BOARD MEETING JULY 31, 1996 SENT TO RAB MEMBERS AND WITH MAILING LIST	ADMIN RECORD	MEDIA PUBLIC PART. RAB		SOUTHWEST DIVISION	
M62535 / 001246 COMM NONE 0004	03-06-1997 08-14-1996 NONE 10.1		SUBCOMMITTEE COMMENTS ON REMEDIAL INVESTIGATION/ FEASIBILITY STUDY OU3 AND RAB COMMENTS ON DRAFT FEASIBILITY STUDY FOR OU3	ADMIN RECORD	COMMENTS FEASIBILITY STU. OPERABLE UNIT RAB REMEDIAL INVES	OU 3	SOUTHWEST DIVISION	
M62535 / 001447 LTR NONE 0004	09-24-1997 08-28-1996 00049 10.1	US EPA SAN FRANCISCO D. HODGES VARIOUS AGENCIES	USEPA REVIEW OF THE DRAFT FEASIBILITY STUDY REPORT FOR OPERABLE UNIT 3	ADMIN RECORD	ARAR CERCLA FEASIBILITY STU. MOFFETT TRENC OPERABLE UNIT USEPA	00001 OU 3	SOUTHWEST DIVISION	

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Record Type	Record Date	Author							
Contr./Guid. No.	CTO No.	Recipient Affil.							
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.	
M62535 / 001245	03-06-1997	DTSC LONG BEACH	PUBLIC NOTICE: INVITATION TO REVIEW AND COMMENT ON A DRAFT NEGATIVE DECLARATION. THE PROPOSED AREA FOR SOIL CLEANUP IS THE NORTHWESTERN AREA OF MCAS TUSTIN	ADMIN RECORD	CLEANUP COMMENTS PUBLIC NOTICE SOIL		SOUTHWEST DIVISION		
NOTE	09-04-1996	M. IBRAHIM							
NONE	NONE	PUBLIC							
0001	10.1								
M62535 / 001168	12-02-1996	BECHTEL NATIONAL	RESPONSE TO BCT AND RAB COMMENTS ON OU 3 REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORTS	ADMIN RECORD	BCT COMMENTS FEASIBILITY STU. MOFF. PUB PART RAB REMEDIAL INVES	00001 OU 3	SOUTHWEST DIVISION		
RESP	09-10-1996	H. MASRI							
N68711-92-D-4670	00049	SOUTHWEST DIVISION							
0020	10.1	P. KENNEDY							
M62535 / 001446	09-24-1997	CRWQCB	CRWQCB AND DTSC COMMENTS ON REMEDIAL INVESTIGATION/ FEASIBILITY STUDY FOR OPERABLE UNIT 3	ADMIN RECORD	COMMENTS FEASIBILITY STU. MOFFETT TRENC REMEDIAL INVES	OU 3	SOUTHWEST DIVISION		
COMM	09-10-1996	M. IBRAHIM							
NONE	00049	VARIOUS AGENCIES							
0008	10.1								
M62535 / 001242	03-06-1997	DTSC LONG BEACH	COMMENTS ON THE REVIEW OF THE REMEDIAL INVESTIGATION/ FEASIBILITY STUDY FOR OPERABLE UNIT 3	ADMIN RECORD	COMMENTS FEASIBILITY STU. MOFFETT TRENC OPERABLE UNIT REMEDIAL INVES	OU 3	SOUTHWEST DIVISION		
COMM	09-11-1996	M. IBRAHIM							
NONE	NONE	VARIOUS AGENCIES							
0009	10.1								
M62535 / 001153	10-21-1996	MCAS TUSTIN	FINAL FACT SHEET #6 - PROPOSED PLAN FOR LANDFILL TRENCHES AND CRASH CREW BURN PITS	ADMIN RECORD	FACT SHEET MEDIA MOFF. PUB PART MOFFETT TRENC PUBLIC PART.	1 OU 3	SOUTHWEST DIVISION		
CTO-0063/0435	10-01-1996								
NEWS	00063	PUBLIC							
N68711-92-D-4670	10.6								
0008									
M62535 / 001238	03-06-1997	DTSC LONG BEACH	COMMENTS ON THE REVIEW OF THE PROPOSED PLAN FOR OPERABLE UNIT 3	ADMIN RECORD	COMMENTS MOFFETT TRENC OPERABLE UNIT	OU 3	SOUTHWEST DIVISION		
COMM	10-07-1996	M. IBRAHIM							
NONE	NONE	VARIOUS AGENCIES							
0006	10.1								

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M62535 / 001436 COMM NONE 0050	09-22-1997 10-07-1996 00049 03.3	DTSC LONG BEACH M. IBRAHIM SOUTHWEST DIVISION VARIOUS AGENCIES	DATA PACKAGE FOR OPERABLE UNIT 3 INCLUDES REVIEW OF PROPOSED PLAN COMMENTS AND RESPONSES	ADMIN RECORD	COMMENTS MOFFETT TRENC OPERABLE UNIT	OU 1 OU 3	SOUTHWEST DIVISION
M62535 / 001170 RESP N68711-92-D-4670 0020	12-02-1996 10-10-1996 00054 10.1	BECHTEL NATIONAL H. MASRI SWDIV R.SELBY	RESPONSE TO USEPA, DTSC AND RAB COMENTS ON THE DRAFT ESI REPORT PLUS COVER LETTER SENT TO REGULATORS	ADMIN RECORD	COMMENTS ESI TECHNICAL DOC.	00002 00008 OU 2	SOUTHWEST DIVISION
M62535 / 001171 NOTE N68711-92-D-4670 0002	12-02-1996 10-16-1996 0063A 10.3	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION R.SELBY	FINAL PUBLIC NOTICE FOR OPERABLE UNIT 3 - MOFFETT TRENCHES AND CRASH CREW BURN PITS	ADMIN RECORD	CRASH BURN PIT MOFF. PUB PART MOFFETT TRENC OPERABLE UNIT PUBLIC NOTICE	00001 OU 3	SOUTHWEST DIVISION
M62535 / 001174 MM N68711-92-D-4670 0002	12-02-1996 10-16-1996 0063A 10.3	MCAS TUSTIN S. MATTHEWS PUBLIC	OCTOBER 24, 1996 RESTORATION ADVISORY BOARD PUBLIC NOTICE	ADMIN RECORD	MOFF. PUB PART PUBLIC RAB	00001	SOUTHWEST DIVISION
M62535 / 001470 NEWS NONE 0001	11-12-1997 10-25-1996 NONE 10.3	FLIGHT JACKET PUBLIC	NEWSPAPER ARTICLE "TASK FORCE APPROVES PLAN FOR TUSTIN"	ADMIN RECORD	CLOSURE MEDIA PUBLIC PART. REUSE		SOUTHWEST DIVISION
M62535 / 001172 NOTE N68711-92-D-4670 0003	12-02-1996 10-28-1996 0063A 10.3	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION R.SELBY	FINAL PUBLIC NOTICE FOR OPERABLE UNIT 3 MOFFETT TRENCHES AND CRASH CREW BURN PITS, PUBLIC MEETING ON NOVEMBER 7, 1996 AND PUBLIC COMMENT PERIOD	ADMIN RECORD	COMMENTS CRASH BURN PIT MOFF. PUB PART MOFFETT TRENC OPERABLE UNIT PUBLIC PUBLIC NOTICE	00001 OU 3	SOUTHWEST DIVISION

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M62535 / 001718 RESP N68711-92-D-4670 0020	01-04-1999 10-29-1996 00049 10.1	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION P. KENNEDY	RESPONSE TO BCT AND RAB COMMENTS ON THE OU-3 REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORTS	ADMIN RECORD	BCT COMMENTS MOFFETT TRENC RAB TECHNICAL DOC.	OU 3	SOUTHWEST DIVISION	
M62535 / 001169 LTR N68711-92-D-4670 0010	12-02-1996 10-30-1996 0063A 10.0	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION R.SELBY	TECHNICAL DOCUMENT DISTRIBUTION PACKAGE INCLUDING SUBCOMMITTEE MAILING LABELS, GENERAL RAB MEMBERSHIP TRANSMITTAL LETTER FOR EXECUTIVE SUMMARY	ADMIN RECORD	MOFF. PUB PART RAB REMEDIAL INVES	00001 OU 1	SOUTHWEST DIVISION	
M62535 / 001166 FACT N68711-92-D-4670 0015	12-02-1996 11-07-1996 0063A 10.6	BECHTEL NATIONAL H. MASRI SWDIV R.SELBY	PUBLIC MEETING AGENDA AND HANDOUTS THAT WERE DISTRIBUTED DURING THE NOVEMBER 7, 1996 PUBLIC MEETING	ADMIN RECORD	MOFF. PUB PART MTG MINS PUBLIC NOTICE PUBLIC PART.	00001 OU 3	SOUTHWEST DIVISION	
M62535 / 001341 MM N68711-92-D-4670 0016	04-30-1997 11-13-1996 00049 10.4	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION R.SELBY	MINUTES FROM THE NOVEMBER 13 1996 OPERABLE UNIT 1 FEASIBILITY STUDY MEETING	ADMIN RECORD	FEASIBILITY STU. MTG MINS OPERABLE UNIT TECHNICAL DOC.	00003 00012 OU 1	SOUTHWEST DIVISION	
M62535 / 001506 MISC N68711-92-D-4670 0075	12-03-1997 11-16-1996 00063 10.4	BECHTEL NATIONAL H. MASRI DISTRUBUTION	HANDOUTS FROM NOVEMBER 16, 1996 RISK ASSESSMENT AND DATA VALIDATION WORKSHOP PRESENTED TO TUSTIN AND EL TORO RESTORATION ADVISORY BOARDS	ADMIN RECORD	FEASIBILITY STU. PUBLIC PART. RAB REMEDIAL INVES RISK		SOUTHWEST DIVISION	
M62535 / 001233 LTR NONE 0001	03-06-1997 11-18-1996 NONE 03.4	EPA SAN FRANCISCO D. HODGES VARIOUS AGENCIES	LETTER REQUESTING ADDITIONAL TIME TO REVIEW DRAFT REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNITS 1 AND 2	ADMIN RECORD	OPERABLE UNIT REMEDIAL INVES TECHNICAL DOC.	OU 1 OU 2	SOUTHWEST DIVISION	

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M62535 / 001584 LTR NONE 0003	02-26-1998 11-18-1996 00049 3.6	CITY OF TUSTIN C. A SHINGLETON MCAS TUSTIN T. CAUGHLAN	PROPOSED INVESTIGATION AND EVALUATION ALTERNATIVES FOR OPERABLE UNIT 3	ADMIN RECORD	CLEANUP MOFFETT TRENC	OU 3	SOUTHWEST DIVISION
M62535 / 001444 LTR NONE 0001	09-24-1997 11-19-1996 00049 3.6	EPA SAN FRANCISCO D. HODGES VARIOUS AGENCIES	USEPA REVIEW OF THE DRAFT REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNITS 1 AND 2.	ADMIN RECORD	OPERABLE UNIT REMEDIAL INVES TECHNICAL DOC. USEPA	OU 1 OU 2	SOUTHWEST DIVISION
M62535 / 000670 NONE MISC NONE 0025	12-17-1999 11-25-1996 NONE 10.1	COMMUNITY MCAF TUSTIN D. CHANDLER	VARIOUS COMMENTS FROM COMMUNITY MEMBERS ON PROPOSED INVESTIGATION AND EVALUATION ALTERNATIVES FOR OPERABLE UNIT 3 (REF. A.R. #1584)	ADMIN RECORD	CLEANUP COMMENTS	1 OU 3	SOUTHWEST DIVISION
M62535 / 001230 COMM NONE 0003	03-06-1997 11-27-1996 NONE 03.4	EPA SAN FRANCISCO D. HODGES VARIOUS AGENCIES	REVIEW AND COMMENTS REGARDING DRAFT REMDIAL INVESTIGATION REPORT APPENDIX E-PRECISION,ACCURACY, COMPLETENESS, REPRESENTITIVENESS,AND COMPARABILITY	ADMIN RECORD	COMMENTS REMEDIAL INVES TECHNICAL DOC.		SOUTHWEST DIVISION
M62535 / 001491 NEWS NONE 0001	11-17-1997 12-05-1996 NONE 10.3	IRVINE WORLD NEWS PUBLIC	NEWSPAPER ARTICLE "IRWD, TUSTIN AGREE ON WATER AND SEWER PLAN FOR HELICOPTER BASE REDEVELOPMENT"	ADMIN RECORD	WATER		SOUTHWEST DIVISION
M62535 / 001492 NEWS NONE 0001	11-17-1997 12-05-1996 NONE 10.3	IRVINE WORLD NEWS PUBLIC	NEWSPAPER ARTICLE "TUSTIN CITY OFFICIALS WANTS NAVY COMMITMENT TO CLEAN UP OLD LANDFILL"	ADMIN RECORD	CLEANUP FUEL MOFF. PUB PART MOFFETT TRENC		SOUTHWEST DIVISION

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Record Type	Record Date	Author						
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Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.
M62535 / 001251	03-10-1997	EPA SAN FRANCISCO	REQUEST FOR EXTENSION REGARDING REVIEW AND COMMENTS ON THE DRAFT FEASIBILITY STUDY REPORT FOR OPERABLE UNITS 1 AND 2	ADMIN RECORD	COMMENTS FEASIBILITY STU. OPERABLE UNIT TECHNICAL DOC.	OU 1 OU 2	SOUTHWEST DIVISION	
LTR NONE 0001	NONE 04.2	D. HODGES VARIOUS AGENCIES						
M62535 / 001318	04-01-1997	BECHTEL NATIONAL	OCTOBER 24, 1996 RESTORATION ADVISORY BOARD POST MEETING MATERIAL - MEETING MINUTES AND ATTACHMENTS	ADMIN RECORD	MTG MINS PUBLIC PART. RAB	00007 00013 00015 00016 0013S OU 1 OU 2 OU 3 ST 72	SOUTHWEST DIVISION	
MM N68711-92-D-4670 0012	00063 10.4	H. MASRI DISTRUBUTION						
M62535 / 001308	04-01-1997	DTSC LONG BEACH	REVIEW COMMENTS ON THE REMEDIAL INVESTIGATION/ FEASIBILITY STUDY FOR OPERABLE UNIT 1 AND OPERABLE UNIT 2	ADMIN RECORD	COMMENTS FEASIBILITY STU. OPERABLE UNIT REMEDIAL INVES TECHNICAL DOC.	00003 00006 00009 00012 0007N 0007S 0013W MMS 05 OU 1 OU 2 ST 72	SOUTHWEST DIVISION	
COMM NONE 0016	00049 10.1	M. IBRAHIM VARIOUS AGENCIES						

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M62535 / 001309	04-01-1997	BECHTEL	RESPONSE TO DTSC AND RAB	ADMIN RECORD	BCT	AD 01	SOUTHWEST DIVISION	
	01-27-1997	NATIONAL	SUBCOMMITTEE COMMENTS ON THE		COMMENTS	AD 02		
COMM	00074	H. MASRI	DRAFT RCRA FACILITY ASSESSMENT		FACILITY ASSESS	AD 03		
N68711-92-D-4670	10.1	DTSC LONG	REPORT AND DRAFT RESPONSE TO		RAB	AD 04		
0015		BEACH	BCT/RAB COMMENTS		RCRA	AMBP 01		
		M. IBRAHIM			TECHNICAL DOC.	AMHP 01		
						AMS 04		
						AMS 07		
						AMS 09		
						AMS 10		
						AMS 11		
						AMS 12		
						AMW 01		
						AS 06		
						AS 08		
						AST 02		
						AST 03		
						AST 04		
						DI 01		
						DSD 02		
						DSD 03		
						DSD 04		
						DSD 05		
						DSD 06		
						DSD 07		
						DSD 08		
						DSS 01		
						DSS 02		
						MMS 01		
						MWA 01		
						MWA 03		
						MWA 07		
						MWA 08		
						MWA 15		
						SAT 05		

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Record Type	Record Date	Author							
Contr./Guid. No.	CTO No.	Recipient Affil.							
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
						ST 67 ST 72 TOW 13 TOW 18 TOW X3 TOW X4			
M62535 / 001310	04-01-1997 01-28-1997	RAB S. REYNOLDS	RESTORATION ADVISORY BOARD (RAB) COMMENTS ON THE OPERABLE UNIT 1 & 2 REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS OPERABLE UNIT RAB REMEDIAL INVES TECHNICAL DOC.	00001 00003 00005 00006 00011 00012 00013 00016 0013W DSS 01 DSS 02 MMSO 04 MMSO 05 ST 67 ST 72 TOW 18A	SOUTHWEST DIVISION		
COMM NONE 0009	00049 10.1	DISTRUBUTION							
M62535 / 001350	04-30-1997 01-30-1997	BECHTEL NATIONAL H. MASRI SOUTHWEST DIVISION R.SELBY	JANUARY 30 1997 RESTORATION ADVISORY BOARD (RAB) PRE- MEETING MATERIAL (MEETING NOTICE AND DRAFT AGENDA) UNREDACTED VERSION AT SOUTHWEST DIVISION	ADMIN RECORD	COMMENTS NOTICE OPERABLE UNIT PUBLIC PART. RAB REMEDIAL INVES SURVEY	OU 1 OU 2	SOUTHWEST DIVISION		
LTR N68711-92-D-4670 0009	00063 10.3								

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M62535 / 001065	03-29-2000	BECHTEL	DRAFT RECORD OF DECISION - MOFFETT	ADMIN RECORD	ARAR	1	SOUTHWEST										
CTO-0049/0925	02-01-1997	NATIONAL INC.	TRENCHES AND CRASH CREW BURN PITS		COPC	OU 3	DIVISION										
RPT	00049		SITE (REFERENCE AR #1453, COMMENTS		CRASH CREW												
N68711-92-D-4670		NAVFAC -	ON DRAFT ROD)		FS												
0090		SOUTHWEST			GW												
		DIVISION			HHRA												
		R. SELBY			MOFFETT TRENC												
					OU												
					PAH												
					PCB												
					RI												
					ROD												
					VOC												
M62535 / 001301	03-27-1997	BECHTEL	TRANSCRIPTS FOR MOFFETT TRENCHES	ADMIN RECORD	COMMENTS	OU 3	SOUTHWEST										
	02-11-1997	NATIONAL	AND CRASH CREW BURN PITS OPERABLE		MOFFETT TRENC		DIVISION										
RPT	00049	H. MASRI	UNIT 3 PUBLIC COMMENT MEETING DATED		OPERABLE UNIT												
N68711-92-D-4670	10.4	SOUTHWEST	NOVEMBER 7, 1996		PUBLIC COMMEN												
0060		DIVISION															
		R.SELBY															
M62535 / 001355	04-30-1997	BECHTEL	DRAFT RESPONSE TO PUBLIC COMMENTS	ADMIN RECORD	OPERABLE UNIT	OU 3	SOUTHWEST										
	02-13-1997	NATIONAL	ON OU3 HANDED AT THEOU3 RAB		PUBLIC COMMEN		DIVISION										
COMM	00049	K. BELGARDE	SUBCOMMITTEE MEETING ON FEBRUARY		RAB												
NONE	10.1	DISTRUBUTION	13 1997														
0022																	
M62535 / 001314	04-01-1997	BECHTEL	FEBRUARY 27, 1997 RESTORATION	ADMIN RECORD	MTG MINS	OU 1	SOUTHWEST										
	02-18-1997	NATIONAL	ADVISORY BOARD PRE-MEETING		PUBLIC	OU 2	DIVISION										
NOTE	00063	H. MASRI	MATERIALS (MEETING NOTICE AND DRAFT		PUBLIC PART.	OU 3											
N68711-92-D-4670	10.3	SOUTHWEST	AGENDA)		RAB												
0003		DIVISION															
		R.SELBY															

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Prc. Date

Author Affil.

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Keywords

Sites

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Box No.

M62535 / 001326

04-04-1997

BECHTEL

RESPONSE TO RAB RFA SUBCOMMITTEE
COMMENTS ON THE DRAFT DATA
PACKAGE FOR TEN NEW AOC'S AND FOUR
EXPANDED AOC'S

ADMIN RECORD

AREA OF CONCE
COMMENTS
DATA
RAB
TECHNICAL DOC.

AD 01

SOUTHWEST
DIVISION

03-27-1997

NATIONAL

COMM

00074

H. MASRI

N68711-92-D-4670

10.1

VARIOUS

0035

AGENCIES

AD 02

AD 03

AD 04

AMBP 01

AMHP 01

AMS 04

AMS 07

AMS 09

AMS 10

AMS 11

AMS 12

AMW 01

AS 06

AS 08

AST 02

AST 03

AST 04

DI 01

DSD 02

DSD 03

DSD 04

DSD 05

DSD 06

DSD 07

DSD 08

DSS 01

DSS 02

MDA 01

MDA 02

MDA 03

MDA 04

MDA 05

MDA 06

MDA 07

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						MDA 08 MDA 09 MDA 10 MMS 01 MWA 01 MWA 03 MWA 07 MWA 08 MWA 15 OU 1 OU 3 SAT 01 ST 67 ST 72 ST 72B TOW 18 TOW 18B TOW X3 TOW X4			
M62535 / 001337	04-23-1997	BECHTEL	COVER LETTER FOR COPIES OF FACT	ADMIN RECORD	CLEANUP		SOUTHWEST		
	04-03-1997	NATIONAL	SHEET #7 (#5 UNDER CLEAN II)-CLEANUP		FUEL		DIVISION		
FACT	0063A	H. MASRI	ACTIVITIES COMPLETE FORMER FUEL						
N68711-92-D-4670	10.6	SOUTHWEST	TANKFARM WITHOUT ENCLOSURES						
0001		R.SELBY							
M62535 / 001471	11-12-1997	TUSTIN NEWS	NEWSPAPER ARTICLE "BASE CLEANUP A	ADMIN RECORD	CLEANUP		SOUTHWEST		
	04-03-1997		BIG JOB"		FUEL		DIVISION		
NEWS	NONE	PUBLIC			MEDIA				
NONE	10.3				MOFF. PUB PART				
0001					MOFFETT TRENC				
					PUBLIC PART.				
					RAB				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001344	04-30-1997	EPA SAN FRANCISCO	USEPA REVIEW OF THE DRAFT REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 1 & OPERABLE UNIT 2	ADMIN RECORD	OPERABLE UNIT	OU 1	SOUTHWEST DIVISION							
LTR	04-15-1997	N. MOUTOUX			REMEDIAL INVES	OU 2								
NONE	00049	VARIOUS AGENCIES			TECHNICAL DOC.	OU 3								
0004	03.4													
M62535 / 001472	11-12-1997	TUSTIN NEWS	NEWSPAPER ARTICLE "SAVING THE HANGARS ENDORSED"	ADMIN RECORD	PUBLIC		SOUTHWEST DIVISION							
NEWS	04-24-1997	PUBLIC												
NONE	NONE													
0001	10.3													
M62535 / 001508	12-03-1997	BECHTEL NATIONAL	APRIL 24, 1997 RESTORATION ADVISORY BOARD POST-MEETING MATERIAL (MINUTES AND ATTACHMENT)	ADMIN RECORD	LEAD	0007S	SOUTHWEST DIVISION							
MM	04-24-1997	H. MASRI			LUFT	0013W								
N68711-92-D-4670	00063	VARIOUS AGENCIES			MOFFETT TRENC	APRON 2								
0014	10.4				MTG MINS	OU 1								
					PUBLIC PART.									
					RAB									
M62535 / 001407	06-16-1997	BECHTEL NATIONAL	RESPONSE TO SUBCOMMITTEE & CITY OF TUSTIN'S COMMENTS ON THE DRAFT REMDIAL INVESTIGATION REPORT OPERABLE UNIT 1 AND 2	ADMIN RECORD	COMMENTS	00001	SOUTHWEST DIVISION							
COMM	05-01-1997	H. MASRI			REMEDIAL INVES	00003								
N68711-92-D-4670	00049	VARIOUS AGENCIES			TECHNICAL DOC.	00005								
0011	10.1					00012								
						00013								
						00016								
						0013W								
						OU 1								
						OU 2								
						ST 72								
M62535 / 001487	11-12-1997	CITY OF TUSTIN	CITY OF TUSTIN'S DRAFT RESPONSES TO COMMENTS, OPERABLE UNIT 3	ADMIN RECORD	COMMENTS	OU 3	SOUTHWEST DIVISION							
RESP	05-07-1997	D. OGDEN			MOFFETT TRENC									
NONE	00049	VARIOUS AGENCIES			RAB									
0020	10.1				REUSE									

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M62535 / 001437 LTR NONE 0002	09-22-1997 05-22-1997 NONE 10.1	CITY OF TUSTIN D. OGDEN MCAS TUSTIN D. CHANDLER	FINAL RESPONSES TO SUBCOMMITTEE COMMENTS FOR DRAFT REMEDIAL INVESTIGATION REPORT OPERABLE UNITS 1 AND 2	ADMIN RECORD	COMMENTS OPERABLE UNIT REMEDIAL INVES	00003 00013 0013W OU 1 OU 2	SOUTHWEST DIVISION
M62535 / 001423 CTO-0049/1143 RPT N68711-92-D-4670 0035	08-20-1997 06-01-1997 00049 05.1	SOUTHWEST DIVISION D. CHANDLER VARIOUS AGENCIES	RECORD OF DECISION OPERABLE UNIT 3 MOFFETT TRENCHES AND CRASH CREW BURN PITS SITE	ADMIN RECORD	CRASH BURN PIT MOFFETT TRENC OPERABLE UNIT ROD	OU 3	SOUTHWEST DIVISION
M62535 / 001481 NOTE N68711-92-D-4670 0009	11-12-1997 06-11-1997 0063A 10.4	BECHTEL NATIONAL H. MASRI VARIOUS AGENCIES	JUNE 24, 1997 RESTORATION ADVISORY BOARD PRE-MEETING AND POST MEETING MATERIALS (PUBLIC NOTICE, AGENDA, AND MEETING MINUTES)	ADMIN RECORD	FEASIBILITY STU. IRP PUBLIC PUBLIC PART. RAB REMEDIAL INVES	00002 00003 00012 0013S 0013W OU 1 ST 72	SOUTHWEST DIVISION
M62535 / 001572 NEWS NONE 0002	02-24-1998 07-01-1997 NONE 10.3	TUSTIN NEWS PUBLIC	NEWSPAPER ARTICLE "MARINES DUMPING CLEAN-UP SOLUTION"	ADMIN RECORD	MEDIA MOFF. PUB PART MOFFETT TRENC REUSE		SOUTHWEST DIVISION
M62535 / 001466 LTR NONE 0002	11-11-1997 07-22-1997 00049 5.4	DTSC LONG BEACH M. IBRAHIM VARIOUS AGENCIES	REVIEW OF THE DRAFT RECORD OF DECISION FOR OPERABLE UNIT 3	ADMIN RECORD	MOFFETT TRENC OPERABLE UNIT ROD	OU 3	SOUTHWEST DIVISION

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M62535 / 001469	11-11-1997 07-28-1997	MCAS TUSTIN G. OPRIA	CAPTAIN GEORGE OPRIA'S COMMENTS ON RESPONSE TO COMMENTS ON OPERABLE UNIT 1 FEASIBILITY STUDY	ADMIN RECORD	BRAC COMMENTS FEASIBILITY STU. LEAD REMEDIAL INVES REUSE	00003 00012 0013S 0013W OU 1 OU 2 OU 3 ST 72	SOUTHWEST DIVISION
COMM NONE 0027	00049 10.1	VARIOUS AGENCIES					
M62535 / 001463	11-11-1997 07-30-1997	BECHTEL NATIONAL D. TEDALDI	RESPONSES TO RAB SUBCOMMITTEE AND CITY OF TUSTIN COMMENTS ON THE MCAS TUSTIN OPERABLE UNIT 1 FEASIBILITY STUDY REPORT	ADMIN RECORD	BRAC FEASIBILITY STU. GROUNDWATER RAB REMEDIAL INVES TCE TPH	00003 00012 0013S OU 1 OU 2 ST 72	SOUTHWEST DIVISION
RESP NONE 0021	00049 10.1	VARIOUS AGENCIES					
M62535 / 001467	11-11-1997 07-30-1997	BECHTEL NATIONAL D. TEDALDI	RESPONSES TO RAB SUBCOMMITTEE AND CITY OF TUSTIN COMMENTS ON THE MCAS TUSTIN IRP-13S INSERTS TO THE REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS GROUNDWATER RAB REMEDIAL INVES SOIL	00003 00016 0013E 0013S 0013W OU 1 OU 2 ST 72	SOUTHWEST DIVISION
RESP N68711-92-D-4670 0008	00049 10.1	VARIOUS AGENCIES					
M62535 / 001457	09-29-1997 08-06-1997	BECHTEL NATIONAL D. TEDALDI	TRANSMITTAL OF DRAFT RECORD OF DECISION FOR OPERABLE UNIT 3	ADMIN RECORD	BRAC MOFFETT TRENC OPERABLE UNIT ROD	OU 3	SOUTHWEST DIVISION
LTR NONE 0001	00049 5.4	DISTRUBUTION					
M62535 / 001453	09-24-1997 08-07-1997	EPA SAN FRANCISCO N. MOUTOUX	COMMENTS TO DRAFT RECORD OF DECISION, OPERABLE UNIT 3, MOFFET TRENCHES AND CRASH CREW BURN PITS SITE	ADMIN RECORD	ARAR CRASH BURN PIT MOFFETT TRENC	OU 3	SOUTHWEST DIVISION
LTR NONE 0004	00049 10.1	VARIOUS AGENCIES					

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M62535 / 001552	02-10-1998	BECHTEL	REVISED RESPONSES TO RAB	ADMIN RECORD	COMMENTS	00003	SOUTHWEST							
	08-20-1997	NATIONAL	SUBCOMMITTEE AND CITY OF TUSTIN		FEASIBILITY STU.	00012	DIVISION							
RESP	00049	D. TEDALDI	COMMENTS ON OPERABLE UNIT 1		REMEDIAL INVES	0013S								
N68711-92-D-4670	10.1	VARIOUS	FEASIBILITY STUDY REPORT			OU 1								
0011		AGENCIES				OU 2								
						ST 72								
M62535 / 001575	02-24-1998	BECHTEL	REVISED RESPONSES TO RAB	ADMIN RECORD	COMMENTS	00003	SOUTHWEST							
	08-20-1997	NATIONAL	SUBCOMMITTEE AND CITY OF TUSTIN		IRP	00016	DIVISION							
RESP	00049	D. TEDALDI	COMMENTS ON THE MCAS TUSTIN IRP-13S		RAB	0013E								
N68711-92-D-4670	10.1	VARIOUS	INSERTS TO THE REMEDIAL		REMEDIAL INVES	0013S								
0009		AGENCIES	INVESTIGATION			0013W								
						OU 1								
						ST 72								
M62535 / 001507	12-03-1997	BECHTEL	AUGUST 21, 1997 RESTORATION	ADMIN RECORD	CLEANUP	00003	SOUTHWEST							
	08-21-1997	NATIONAL	ADVISORY BOARD PRE-MEETING AND		COMMENTS	00012	DIVISION							
MISC	NONE		POST-MEETING MATERIAL (NOTICE,		MOFFETT TRENC	00016								
NONE	10.4	VARIOUS	AGENDA AND ATTACHMENTS)		PUBLIC PART.	0013E								
0075		AGENCIES			RAB	0013S								
						0013W								
						OU 1								
						OU 2								
						OU 3								
						ST 72								
M62535 / 001473	11-12-1997	TUSTIN NEWS	NEWSPAPER ARTICLE "SHINGLETON	ADMIN RECORD	CLOSURE		SOUTHWEST							
	08-28-1997		ELECTED PRESIDENT OF NATIONAL BASE		REUSE		DIVISION							
NEWS	NONE	PUBLIC	REUSE GROUP"											
NONE	10.3													
0001														
M62535 / 001461	11-11-1997	VARIOUS	CITY OF TUSTIN RESPONSE TO	ADMIN RECORD	COMMENTS	IRP 12	SOUTHWEST							
	09-04-1997	AGENCIES	COMMENTS ON THE DRAFT FEASIBILITY		FEASIBILITY STU.	IRP 3	DIVISION							
RESP	00141		STUDY REPORT FOR OPERABLE UNIT 1		MOFFETT TRENC	OU 1								
NONE	10.1	SOUTHWEST			OPERABLE UNIT	OU 3								
0016		DIVISION			RAB									
		T. MARTIN			REMEDIAL INVES									

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M62535 / 001474 NEWS NONE 0001	11-12-1997 09-10-1997 NONE 10.3	O.C. REGISTER PUBLIC	NEWSPAPER ARTICLE "COLONEL UP TO TASK OF CONVERTING BASES"	ADMIN RECORD	CLOSURE MEDIA PUBLIC PART. REUSE		SOUTHWEST DIVISION
M62535 / 001475 NEWS NONE 0001	11-12-1997 09-18-1997 NONE 10.3	TUSTIN NEWS PUBLIC	NEWSPAPER ARTICLE "CHANGE OF COMMAND AND DESIGNATION" (DOWNGRADE FROM AIR STATION TO AIR FACILITY)	ADMIN RECORD	CLOSURE MEDIA PUBLIC PART.		SOUTHWEST DIVISION
M62535 / 001454 MM NONE 0008	09-29-1997 09-19-1997 00633 10.4	BECHTEL NATIONAL D. TEDALDI DISTRUBUTION	RESTORATION ADVISORY BOARD MEETING MINUTES OF AUGUST 21, 1997	ADMIN RECORD	CLEANUP FEASIBILITY STU. MOFFETT TRENC MTG MINS PUBLIC PART. RAB RISK	00003 OU 1 OU 3	SOUTHWEST DIVISION
M62535 / 001479 FACT N68711-92-D-4670 0004	11-12-1997 10-01-1997 00063 10.6	MCAS TUSTIN D. CHANDLER PUBLIC	FINAL FACT SHEET # 8 (#6 UNDER CLEAN II) "GROUNDWATER CONTAMINATION AND CLEANUP - AN OVERVIEW", DATED OCTOBER 1997	ADMIN RECORD	FACT SHEET FEASIBILITY STU. GROUNDWATER PUBLIC PART. RISK SOIL TCE	00003 00005 00012 0013S	SOUTHWEST DIVISION
M62535 / 001442 LTR NONE 0005	09-24-1997 11-01-1997 00049 3.6	CITY OF TUSTIN W. A. HUSTON VARIOUS AGENCIES	OPERABLE UNIT 3 REMEDIATION	ADMIN RECORD	MOFFETT TRENC OPERABLE UNIT RAB REMEDIAL INVES REUSE RISK	OU 3	SOUTHWEST DIVISION

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M62535 / 001511	12-15-1997	BECHTEL	RESPONSE TO COMMENTS RECORD OF	ADMIN RECORD	GROUNDWATER	OU 3	SOUTHWEST	
	11-06-1997	NATIONAL	DECISION FOR OPERABLE UNIT 3		ROD		DIVISION	
RESP	00049	D. TEDALDI						
N68711-92-D-4670	10.1	SOUTHWEST						
0006		DIVISION						
		R.SELBY						
M62535 / 001510	12-15-1997	BECHTEL	DRAFT FEASIBILITY STUDY REPORT FOR	ADMIN RECORD	COMMENTS	00003	SOUTHWEST	
	11-10-1997	NATIONAL	OPERABLE UNIT 1 RESPONSE TO		LEAD	00012	DIVISION	
RESP	00141	D. TEDALDI	COMMENTS (REF: AR #1702 12/18/98		RAB	OU 1		
N68711-92-D-4670	10.1	SOUTHWEST	DRAFT FEASIBILITY STUDY REPORT; AR		ROD			
0010		DIVISION	#1720 3/2/99 DRAFT FEASIBILITY STUDY		TCE			
		R.SELBY	REPORT; AR #1731 RESPONSE TO					
			COMMENTS ON 3/2/99 DRAFT FEASIBILITY					
			STUDY REPORT)					

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M62535 / 001505	CTO-0049/1165	12-03-1997	BECHTEL	RPT	11-14-1997	NATIONAL	N68711-92-D-4670	00049	M. DALRYMPLE	1500	03.4	SOUTHWEST DIVISION	DRAFT FINAL REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNITS 1 AND 2 VOLUMES 1 THROUGH 5 (ACCEPTED AS FINAL PER 2/18/98 NOTIFICATION TO REGULATORS - REFER TO AR #'S 1593 & 1627) (INCLUDES REPLACEMENT PAGES OF 11/97 FOR VOL. 3, DCN# CTO-0049/1241)	ADMIN RECORD	AREA OF CONCE CANCER GROUNDWATER IRP REMEDIAL INVES SOIL TCE TECHNICAL DOC. VOC	00001 00003 00005 00006 00007 00008 00009 00011 00012 00013 00016 0007N 0007S 0013E 0013S 0013W AST 169 AST 170 DSS 01 DSS 02 MDA 02 MDA 04 MMS 04 MMS 05 MWA 18 OU 1 OU 2 OU 3 ST 67 ST 72 TOW 18 A UST 29 A UST 90	SOUTHWEST DIVISION

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M62535 / 001578		02-26-1998	MCAS TUSTIN		11-21-1997	D. CHANDLER							COMMENTS ON FACT SHEET # 9 DRAFT	NON-ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
FAX		00155	BECHTEL														
NONE		10.1	NATIONAL														
0005			J. GOUGE														
M62535 / 001551		02-10-1998	BECHTEL		12-02-1997	NATIONAL							OCTOBER 23, 1997 RESTORATION ADVISORY BOARD PRE- MEETING AND POST MEETING MATERIALS (PUBLIC NOTICE, AGENDA, MEETING MINUTES)	ADMIN RECORD	FEASIBILITY STU. MOFFETT TRENC RAB	00002 00003 00009 00012 0013W APRON 1 HANGAR 2 OU 1 OU 3 ST 72 UST 133 UST 135 UST 185 UST 23 C UST 42 UST 530 A	SOUTHWEST DIVISION
MM		00155	D. TEDALDI														
N68711-92-D-4670		10.4	DISTRUBUTION														
0035																	
M62535 / 001579		02-26-1998	DTSC LONG BEACH		12-10-1997	R. OKUDA							NAVY/AGENCIES COMMENTS ON TUSTIN FACT SHEET # 9 DRAFT	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
COMM		00155	MCAS TUSTIN														
NONE		10.1	D. CHANDLER														
0008																	
M62535 / 001580		02-26-1998	DTSC LONG BEACH		12-15-1997	R. OKUDA							DTSC COMMENTS ON THE OCTOBER 23, 1997 RAB MEETING MINUTES	ADMIN RECORD	COMMENTS RAB		SOUTHWEST DIVISION
COMM		00155	MCAS TUSTIN														
NONE		10.1	D. CHANDLER														
0003																	

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02-26-1998

BECHTEL

DRAFT FEASIBILITY STUDY REPORT FOR
OPERABLE UNIT 1 - RESPONSE TO
COMMENTS FROM THE CITY OF TUSTIN

ADMIN RECORD

COMMENTS
FEASIBILITY STU.
LEAD
REMEDIAL INVES

00003

00012

OU 1

SOUTHWEST
DIVISION

RESP

00141

D. TEDALDI

N68711-92-D-4670
0009

10.1

VARIOUS
AGENCIES

M62535 / 001582

02-26-1998

BECHTEL

RESPONSE TO USEPA COMMENTS
REGARDING RECORD OF DECISION FOR
OPERABLE UNIT 3

ADMIN RECORD

ARAR
COMMENTS
MOFFETT TRENC
ROD

OU 3

SOUTHWEST
DIVISION

RESP

00049

D. TEDALDI

N68711-92-D-4670
0005

10.1

VARIOUS
AGENCIES

M62535 / 001553

02-10-1998

BECHTEL

FINAL FACT SHEET #9 (#7 UNDER CLEAN II)
"IDENTIFYING AND SELECTING
TECHNOLOGIES AND ALTERNATIVES FOR
GROUNDWATER TREATMENT"

ADMIN RECORD

FACT SHEET
FEASIBILITY STU.
GROUNDWATER
IRP
REMEDIAL INVES

00003

00012

0013S

OU 1

SOUTHWEST
DIVISION

FACT

00155

D. TEDALDI

N68711-92-D-4670
0004

10.6

PUBLIC

M62535 / 001762

07-01-1999

NEWSPAPERS

THE TUSTIN NEWS-JAN 07,1998 "BASE
CLOSURE A HOT TOPIC"

ADMIN RECORD

SOUTHWEST
DIVISION

NEWS

00155

NONE

00.0

0001

M62535 / 001763

07-01-1999

NEWSPAPERS

THE TUSTIN NEWS-JAN 07,1998

ADMIN RECORD

SOUTHWEST
DIVISION

NEWS

00155

NONE

00.0

0001

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M62535 / 001631		05-14-1998	BECHTEL										JANUARY 22, 1998 RESTORATION	ADMIN RECORD	IRP	00001	SOUTHWEST DIVISION
		01-22-1998	NATIONAL										ADVISORY BOARD PRE- AND POST-		MOFF. PUB PART	00002	
MM		00155	D. TEDALDI										MEETING MATERIALS (PUBLIC NOTICE,		MTG MINS	00005	
N68711-92-D-4670		10.4	DISTRUBUTION										AGENDA, MEETINGMINUTES, HANDOUTS)		PAH	00009	
0070															RAB	00023	
															UST	00026	
																00042	
																00047	
																00058	
																0007S	
																00135	
																0013W	
																00171	
																00181	
																00185	
																00222	
																0027A	
																0027B	
																00300	
																00530A	
																0133B	
																AST 169	
																AST 170	
																OU 1	
																OU 2	
																OU 3	
M62535 / 001623		05-07-1998	TUSTIN NEWS										NEWSPAPER ARTICLE "DEADLINE NEARS	ADMIN RECORD	EIR		SOUTHWEST DIVISION
		02-26-1998											FOR PUBLIC TO GIVE INPUT ON BASE		MEDIA		
NEWS		NONE	PUBLIC										PLAN"		PUBLIC COMMEN		
NONE		10.3															
0002																	

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TUSTIN NEWS

NEWSPAPER ARTICLE "BOARD WILL EYE
BASE CLEANUP TONIGHT"

ADMIN RECORD

AREA OF CONCE
CLEANUP

SOUTHWEST
DIVISION

NEWS

NONE

PUBLIC

MOFF. PUB PART

NONE

10.3

MOFFETT TRENC

0002

RAB

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M62535 / 001632		05-14-1998	BECHTEL										MARCH 12, 1998 RESTORATION ADVISORY	ADMIN RECORD	BCP	00002	SOUTHWEST DIVISION
		03-12-1998	NATIONAL										BOARD PRE- AND POST-MEETING		IRP	00003	
MM		00155	D. TEDALDI										MATERIALS (PUBLIC NOTICE, AGENDA, MEETING MINUTES, HANDOUTS)		MTG MINS	00005	
N68711-92-D-4670		10.4	DISTRUBUTION												RAB	00006	
0080															UST	00008	
																00009	
																00011	
																00012	
																00042	
																00047	
																0007S	
																0013E	
																0013S	
																0013W	
																00185	
																00222	
																0023C	
																0027A	
																0027B	
																00300	
																00530A	
																AST 169	
																AST 170	
																HANGAR 1	
																HANGAR 2	
																OU 1	
																OU 2	
																OU 3	
																PARCEL 11A	
																PARCEL 33	
																PARCEL 38	
																PARCEL 39	
																PARCEL 41A	
																PARCEL 41B	
																PARCEL 6	

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Keywords

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TUSTIN NEWS

NEWSPAPER ARTICLE "BASE PLAN AND
BUDGET ARE AT TOP OF CITY GOALS LIST"

ADMIN RECORD

MEDIA
REUSE

PARCEL 8 B
PARCEL 8 C

SOUTHWEST
DIVISION

NEWS

NONE

0002

NONE

10.3

PUBLIC

M62535 / 001620

04-30-1998

TUSTIN NEWS

NEWSPAPER ARTICLE "BOARD REVIEWS
BASE CLEANUP"

ADMIN RECORD

CLOSURE
MEDIA
RAB

SOUTHWEST
DIVISION

NEWS

NONE

0001

NONE

10.3

PUBLIC

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M62535 / 001616		04-30-1998	BECHTEL										DRAFT RECORD OF DECISION NO ACTION	ADMIN RECORD	AREA OF CONCE	00002	SOUTHWEST
		04-01-1998	NATIONAL										SITES AND AREAS OF CONCERN		IRP	00005	DIVISION
RPT		00141													ROD	00006	
N68711-92-D-4670		05.1	SOUTHWEST													00008	
0150			DIVISION													00011	
																00016	
																0013E	
																0013W	
																AD 04	
																AS 06	
																AS 08	
																AST 02	
																AST 04	
																DSS 01	
																DSS 02	
																MDA 02	
																MDA 04	
																MDA 07	
																MMS 01	
																MMS 04	
																MMS 05	
																MWA 03	
																OU 1	
																ST 67	

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M62535 / 001624	05-07-1998	BECHTEL	DRAFT - PROPOSED PLAN FOR NO	ADMIN RECORD	AREA OF CONCE	00002	SOUTHWEST	
	04-01-1998	NATIONAL	FURTHER ACTION AT TWENTY-THREE		CLEANUP	00005	DIVISION	
PLAN	00155	D. TEDALDI	LOCATIONS (REFERENCE AR #805		IRP	00006		
N68711-92-D-4670	04.3	SOUTHWEST	RESPONSE TO COMMENTS ON PP/NFA)			00008		
0016		DIVISION				00011		
						00016		
						0005N		
						0005S		
						0013E		
						0013W		
						AD 04		
						AS 06		
						AS 08		
						AST 02		
						AST 04		
						DSS 01		
						DSS 02		
						MDA 02		
						MDA 04		
						MDA 07		
						MMS 01		
						MMS 04		
						MMS 05		
						MWA 03		
						ST 67		
M62535 / 001621	04-30-1998	TUSTIN NEWS	NEWSPAPER ARTICLE "BATTLING	ADMIN RECORD	MEDIA		SOUTHWEST	
	04-09-1998		BUREAUCRATIC BORDER WARS"		REUSE		DIVISION	
NEWS	NONE	PUBLIC						
NONE	10.3							
0002								

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M62535 / 001618 NEWS NONE 0002	04-30-1998 04-16-1998 NONE 10.3	TUSTIN NEWS PUBLIC	NEWSPAPER ARTICLE "TUSTIN NAMED BUSINESS TOP SPOT IN OC"	ADMIN RECORD	MEDIA		SOUTHWEST DIVISION
M62535 / 001760 NEWS NONE 0002	07-01-1999 04-23-1998 00155 00.0	NEWSPAPERS	THE TUSTIN NEWS-APR 23,1998 "CHRONOLOGY OF TUSTIN'S PROGRESS"	ADMIN RECORD			SOUTHWEST DIVISION
M62535 / 001761 NEWS NONE 0003	07-01-1999 04-23-1998 00155 00.0	NEWSPAPERS	THE TUSTIN NEWS-APR 23,1998 "BLUEPRINT FOR THE FUTURE: PREDICTING TUSTIN'S GROWTH"PROJECTING TUSTIN IN THE YEAR 2020	ADMIN RECORD			SOUTHWEST DIVISION
M62535 / 001674 MM N68711-92-D-4670 0100	09-15-1998 05-14-1998 00155 10.4	BECHTEL NATIONAL D. TEDALDI VARIOUS AGENCIES	MAY 14, 1998 RESTORATION ADVISORY BOARD PRE AND POST MEETING MATERIALS (PUBLIC NOTICE, AGENDA, MEETING MINUTES, HANDOUTS)	ADMIN RECORD	MOFF. PUB PART MTG MINS RAB	00001 00003 00009 00012 0013S APRON 1 APRON 2 APRON 3 APRON 4 OU 1 OU 3	SOUTHWEST DIVISION
M62535 / 001672 MISC NONE 0006	07-15-1998 06-17-1998 NONE 10.0	BEC OFFICE RAB MEMBERS	RESTORATION ADVISORY BOARD TOUR PACKET INCLUDES HANDOUT, MAP, AND FACT SHEET NO. 6	ADMIN RECORD	MOFF. PUB PART PUBLIC PART. RAB	00001 00003 BLDG.29 A	SOUTHWEST DIVISION

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M62535 / 001687	09-29-1998	BECHTEL	JULY 9, 1998 RESTORATION ADVISORY	ADMIN RECORD	MTG MINS	00003	SOUTHWEST							
	07-09-1998	NATIONAL	BOARD PRE AND POST MEETING PACKET		RAB	00012	DIVISION							
MM	00155	D. TEDALDI	(PUBLIC NOTICE, AGENDA, MEETING			0013S								
N68711-92-D-4670	10.4	VARIOUS	MINUTES AND ATTACHMENTS)			APRON 1								
0053		AGENCIES				AST 169								
						AST 170								
						HANGER 2								
						OU 1								
						OU 3								
						UST 222								
						UST 27 A								
						UST 27 B								
						UST 42								
						UST 47 A								
M62535 / 001703	12-31-1998	BECHTEL	SEPTEMBER 10, 1998 RESTORATION	ADMIN RECORD	IRP	00001	SOUTHWEST							
	08-20-1998	NATIONAL	ADVISORY BOARD PRE AND POST		MTG MINS	00002	DIVISION							
MM	00155	D. TEDALDI	MEETING MATERIALS INCLUDING MEETING		RAB	00003								
N68711-92-D-4670	10.4	VARIOUS	NOTICE, AGENDA, MEETING MINUTES,			00009								
0058		AGENCIES	AND ATTACHMENTS			0013S								
						0013W								
						APRON 1								
						AST 169								
						AST 170								
						AST 194 A								
						AST 194 B								
						BLDG. 23 A								
						BLDG. 567								
						HANGAR 1								
						PARCEL 9								
						UST 105								
						UST 222								

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M62535 / 001712		01-13-1999	BECHTEL										RESPONSE TO INITIAL BCT COMMENTS ON THE DRAFT NO FURTHER ACTION PROPOSED PLAN (REFERENCE DOCUMENT NUMBER 001624)	ADMIN RECORD	BCT COMMENTS	00002 0013W	SOUTHWEST DIVISION
RESP		10-05-1998	NATIONAL														
N68711-92-D-4670		00155	D. TEDALDI														
0005		10.1	VARIOUS AGENCIES														
M62535 / 000224		12-16-1999	SOUTHWEST										RESPONSE TO BCT COMMENTS DATED AUGUST 24, 1998 ON THE NO FURTHER ACTION PROPOSED PLAN FOR 23 LOCATIONS	ADMIN RECORD	COMMENTS NFA RESPONSE SOIL	13W 2 MWA 03	SOUTHWEST DIVISION
NONE		10-16-1998	DIVISION														
MISC		NONE	J. PAYNE														
NONE		10.1	RWQCB RIVERSIDE P. HANNON														
M62535 / 000337		12-16-1999	MCAF TUSTIN RAB										NOVEMBER 12, 1998 RESTORATION ADVISORY BOARD PRE-MEETING MATERIALS - MEETING NOTICE, AGENDA, RAB ROSTER, AND SEPTEMBER 10, 1998 RAB MEETING MINUTES	ADMIN RECORD	GW MTG MINS PUBNOT RAB UST	1 13S 13W 2 3 9B OU 1 OU 3	SOUTHWEST DIVISION
CTO-0155/0321		11-03-1998															
MM		00155	PUBLIC INTEREST														
N68711-92-D-4670		10.4															
0019																	
M62535 / 001709		01-05-1999	BECHTEL										RESPONSE TO BCT COMMENTS ON DRAFT RECORD OF DECISION JUNE 1997 FOR OPERABLE UNIT 3	ADMIN RECORD	BCT COMMENTS MOFFETT TRENC	OU 3 PETERS CAN	SOUTHWEST DIVISION
RESP		11-17-1998	NATIONAL														
N68711-92-D-4670		00141	D. TEDALDI														
0009		10.1	VARIOUS AGENCIES														
M62535 / 000353		12-16-1999	MCAS TUSTIN RAB										RESTORATION ADVISORY BOARD POST-MEETING MATERIALS FOR SEPTEMBER 10, 1999 RAB MEETING	ADMIN RECORD	GW MTG MINS PRG RAB SOIL UST	1 13S 13W 3 9B OU 1 OU 3	SOUTHWEST DIVISION
CTO-0155/0339		11-19-1998															
MM		00155	RAB MEMBERS														
N68711-92-D-4670		10.4															
0035																	

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Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001759	07-01-1999	NEWSPAPERS	TUSTIN NEWS-NOV 19, 1998 "CONSULTANT HIRED FOR BASE BUSINESS PLAN"	ADMIN RECORD										SOUTHWEST DIVISION
NEWS	11-19-1998													
NONE	00155													
0001	00.0													
M62535 / 001700	12-31-1998	BECHTEL	DRAFT RECORD OF DECISION OPERABLE UNIT 3 MOFFETT TRENCHES AND CRASH CREW BURN PITS SITE	ADMIN RECORD							CRASH BURN PIT	00001	SOUTHWEST DIVISION	
	12-01-1998	NATIONAL									MOFFETT TRENC	OU 1		
RPT	00141	D. TEDALDI									ROD	OU 2		
N68711-92-D-4670	05.1	VARIOUS										OU 3		
0085														
M62535 / 001755	07-01-1999	NEWSPAPERS	TUSTIN NEWS-DEC 03, 1998 "AROUND TOWN - SOUTH TUSTIN"	ADMIN RECORD										SOUTHWEST DIVISION
	12-03-1998													
NEWS	00155													
NONE	00.0													
0001														
M62535 / 001752	07-01-1999	NEWSPAPERS	TUSTIN NEWS-DEC 10, 1998 "COUNCIL PAVES WAY FOR HOMELESS SHELTER"	ADMIN RECORD										SOUTHWEST DIVISION
	12-10-1998													
NEWS	00155													
NONE	00.0													
0001														
M62535 / 001702	12-31-1998	BECHTEL	REVISED DRAFT FEASIBILITY STUDY REPORT FOR OPERABLE UNIT 1 (REFERENCE AR #1510 RESPONSE TO COMMENTS DRAFT FS REPORT; AR #1720, 3/2/99 DRAFT FEASIBILITY STUDY REPORT; AR #1731, RESPONSE TO COMMENTS ON 3/2/99 DRAFT FEASIBILITY STUDY REPORT)	ADMIN RECORD							FEASIBILITY STU.	00003	SOUTHWEST DIVISION	
	12-18-1998	NATIONAL									IRP	00012		
RPT	00141	T. FENG									VOC	0013S		
N68711-92-D-4670	04.2	VARIOUS										MWA 18		
1000		AGENCIES										OU 1		
												OU 2		
												PETERS CAN		
												ST 72		
M62535 / 001750	06-29-1999	NEWSPAPERS	THE TUSTIN NEWS-12/24/98 "SOUTH TUSTIN"	ADMIN RECORD										SOUTHWEST DIVISION
	12-24-1998													
NEWS	00155													
NONE	00.0													
0001														

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M62535 / 001747 NEWS NONE 0001	06-29-1999 12-31-1998 00155 00.0	NEWSPAPERS	THE TUSTIN NEWS - THURSDAY 12/31/98 "TUSTIN READIES FOR '99"	ADMIN RECORD			SOUTHWEST DIVISION
M62535 / 001748 NEWS NONE 0001	06-29-1999 12-31-1998 00155 00.0	NEWSPAPERS	THE TUSTIN NEWS - THURSDAY 12/31/98 "SOUTH TUSTIN"	ADMIN RECORD			SOUTHWEST DIVISION
M62535 / 001732 CTO-0155/0370 MM N68711-92-D-4670 0020	04-06-1999 01-05-1999 00155 10.4	BECHTEL NATIONAL D. TEDALDI SOUTHWEST DIVISION R.SELBY	JANUARY 14, 1999 RESTORATION ADVISORY BOARD PRE-MEETING MATERIALS - MEETING NOTICE, AGENDA, AND NOVEMBER 12, 1998 MEETING MINUTES WITH CONFIDENTIAL MAILING LIST	ADMIN RECORD CONFIDENTIAL	FEASIBILITY STU. GROUNDWATER PUBLIC ROD	OU 1 OU 3	SOUTHWEST DIVISION
M62535 / 001740 CTO-0155/0398 MM N68711-92-D-4670 0050	04-13-1999 01-28-1999 00155 10.4	BECHTEL NATIONAL D. TEDALDI SOUTHWEST DIVISION R.SELBY	NOVEMBER 12, 1998 RESTORATION ADVISORY BOARD POST MEETING MATERIALS - MEETING MINUTES AND ATTACHMENTS	ADMIN RECORD	MTG MINS PUBLIC RAB	TUSTIN	SOUTHWEST DIVISION
M62535 / 000355 NONE LTR NONE 0005	12-16-1999 02-01-1999 NONE 04.5	SOUTHWEST DIVISION W. SANDZA DTSC CYPRESS J. SCANDURA	PROPOSAL TO FORM A JOINT FORUM FOR ISSUE RESOLUTION DUE TO DTSC WORK SLOWDOWN AT SOUTHERN CALIFORNIA BASES, FOR NFA PROPOSED PLAN AT MISCELLANEOUS DISPOSAL AREA 2	ADMIN RECORD	NFA PROPOSED PLAN		SOUTHWEST DIVISION
M62535 / 001725 RESP N68711-92-D-4670 0010	03-09-1999 02-04-1999 00141 03.4	BECHTEL NATIONAL D. TEDALDI SOUTHWEST DIVISION R.SELBY	FINAL RESPONSE TO BCT COMMENTS ON DRAFT RI/FS REPORTS FOR OPERABLE UNIT #3	ADMIN RECORD	BCT FEASIBILITY STU. REMEDIAL INVES RESP	MCAF UNIT #3	SOUTHWEST DIVISION

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M62535 / 001739	CTO-0155/0408	04-13-1999	BECHTEL NATIONAL	FACT	02-10-1999			00155					DRAFT - FACT SHEET - OU-3, RECENT DEVELOPEMENTS AT MOFFETT TRENCHES AND CRASH CREW BURN PITS	ADMIN RECORD	CRASH BURN PIT FACT SHEET MOFFETT TRENC RAB	OU 3	SOUTHWEST DIVISION
N68711-92-D-4670 0025		10.6	VARIOUS AGENCIES														
M62535 / 001733	NONE	04-06-1999	BECHTEL NATIONAL	RPT	02-24-1999			00141					REVISED DRAFT - RECORD OF DECISION/REMEDIAL ACTION PLAN OPERABLE UNIT 3 MOFFETT TRENCHES AND CRASH CREW BURN PIT SITE	ADMIN RECORD	CRASH BURN PIT MOFFETT TRENC ROD	OU 3	SOUTHWEST DIVISION
N68711-92-D-4670 0150		05.0	D. TEDALDI SOUTHWEST DIVISION R.SELBY														
M62535 / 001744	CTO-0155/0454	06-29-1999	BECHTEL NATIONAL	MISC	03-01-1999			00155					FACT SHEET - RECENT DEVELOPMENTS AT MOFFETT TRENCHES AND CRASH CREW BURN PITS	ADMIN RECORD	CRASH BURN PIT FACT SHEET MOFFETT TRENC PUBLIC	OU 3	SOUTHWEST DIVISION
N68711-92-D-4670 0020		10.6	D. TEDALDI VARIOUS AGENCIES														
M62535 / 001720	CTO-0141/0403	03-09-1999	BECHTEL NATIONAL	RPT	03-02-1999			00141					REVISED DRAFT FEASIBILITY STUDY REPORT FOR OPERABLE UNIT 1 (REFERENCE AR #1510, RESPONSE TO COMMENTS ON DRAFT FS REPORT; AR #1702, 12/18/98 DRAFT FS STUDY REPORT; AR #1731 RESPONSE TO COMMENTS ON 3/2/99 DRAFT FS REPORT)	ADMIN RECORD	ADMIN RECORD BRAC FEASIBILITY STU.	OU 1	SOUTHWEST DIVISION
N68711-92-D-4670 0250		04.2	T. FENG SOUTHWEST DIVISION														
M62535 / 001743	MM	06-24-1999	BECHTEL NATIONAL		03-25-1999			00155					APRIL 8, 1999 RESTORATION ADVISORY BOARD PRE-MEETING MATERIALS - MEETING NOTICE, AGENDA, RAB ROSTER, AND JANUARY 14, 1999 MEETING MINUTES	ADMIN RECORD INFO REPOSITORY	GW MTG MINS RAB	1 12 13S 3	SOUTHWEST DIVISION
N68711-92-D-4670 0020		10.4	D. TEDALDI VARIOUS AGENCIES													OU 1 OU 3	
M62535 / 001745	MM	06-29-1999	BECHTEL NATIONAL		03-31-1999			00170					BCT MEETING MINUTES - REVIEW RESULTS FROM MDA-02 FIELDINVESTIGATION AND DETERMINE TO PROCEED WITH THE PREPARATION OF NFA RAP/PP AND ROD DTD MARCH 23, 1999	ADMIN RECORD	BCT NO FURTH. ACTI ROD	MDA 02	SOUTHWEST DIVISION
N68711-92-D-4670 0010		10.4	D. TEDALDI SOUTHWEST DIVISION R.SELBY														

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M62535 / 001746		06-29-1999	BECHTEL										JANUARY 14, 1999 RESTORATION	ADMIN RECORD	CRASH BURN PIT	OU 1	SOUTHWEST
		04-13-1999	NATIONAL										ADVISORY BOARD POST-MEETING	CONFIDENTIAL	MOFFETT TRENC	OU 3	DIVISION
MM		00155	D. TEDALDI										MATERIALS - MEETING MINUTES &		PUBLIC		
N68711-92-D-4670		10.4	SOUTHWEST										ATTACHMENTS (MAILING LIST IS		RAB		
0040			DIVISION										CONFIDENTIAL)				
			R.SELBY														
M62535 / 001765		07-01-1999	BECHTEL										JUNE 10, 1999 RESTORATION ADVISORY	ADMIN RECORD	PUBLIC	OU 1	SOUTHWEST
		05-27-1999	NATIONAL										BOARD PRE-MEETING MATERIALS -		RAB		DIVISION
MM		00155	D. TEDALDI										MEETING NOTICE, AGENDA, AND APRIL 8,				
N68711-92-D-4670		10.3	SOUTHWEST										1999 DRAFT MEETING MINUTES				
0015			DIVISION														
			R.SELBY														
M62535 / 001775		08-31-1999	BECHTEL										APRIL 8, 1999 RESTORATION ADVISORY	ADMIN RECORD	MOFFETT TRENC	OU 3	SOUTHWEST
CTO-0155/0524		06-29-1999	NATIONAL										BOARD MEETING MINUTES, SIGN-IN		PUBLIC		DIVISION
MM		00155	D. TEDALDI										SHEETS, RAB ROSTER, AND HANDOUTS		RAB		
N68711-92-D-4670		10.4	SOUTHWEST												ROD		
0075			DIVISION														
			R.SELBY														

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Author Affil.

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- - - - - Subject

- - - - - Classification

Keywords

Sites

Location
Box No.

M62535 / 001801
CTO-0155/0498
RPT
N68711-92-D-4670
0033

04-19-2000
07-01-1999
00155

BECHTEL
NATIONAL INC
D. TEDALDI
NAVFAC -
SOUTHWEST
DIVISION
R. SELBY

REMEDIAL ACTION PLAN/PROPOSED PLAN
FOR NO FURTHER ACTION AT TWENTY
THREE IRP SITES AND AREAS OF
CONCERN (INCLUDES RESPONSE TO
COMMENTS OF THE USEPA, DTSC, AND
SARWQCB)

ADMIN RECORD

AOC
ARAR
AST
BRAC
BTEX
COPC
DCE
GW
IRP
METALS
PAH
PCB
PCE
PESTICIDES
PRG
RCRA
RFA
RI
ROD
SOIL
SVOC
TCE
TPH
TRPH
VOC
WATER

11
13E
13W
16
2
5N
5S
6
8
AD 04
AST 02
AST 04
BLDG 161
BLDG 19
BLDG 262
BLDG 263
BLDG 28
BLDG 71A
BLDG 71G
BLDG 71H
BLDG 71I
DSS 01
DSS 02
MDA 02
MDA 04
MDA 07
MMS 01
MMS 04
MMS 05
MWA 03
OU 1
OU 2
ST 67

SOUTHWEST
DIVISION

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M62535 / 001772	CTO-0141/0505	08-31-1999	BECHTEL NATIONAL	MM	07-13-1999	T. HEIRONIMUS	N68711-92-D-4670	00141		10.4			BCT MEETING MINUTES FOR JUNE 10, 1999 - REVISED DRAFT OU-3 ROD, REVISED DRAFT OU-1 FS, DRAFT VEE PILOT TEST TECH MEMO, SCHEDULE OF DELIVERABLES	ADMIN RECORD	FEASIBILITY STU. MOFFETT TRENC PUBLIC ROD	OU 1 OU 3	SOUTHWEST DIVISION
M62535 / 001776	CTO-0155/0561	08-31-1999	BECHTEL NATIONAL	MM	07-29-1999	T. HEIRONIMUS	N68711-92-D-4670	00155		10.4			AUGUST 12, 1999 RESTORATION ADVISORY BOARD MEETING MAILER - MEETING NOTICE, AGENDA, JUNE 10, 1999 RAB MEETING MINUTES, RAB ROSTER, AND RAB SIGN-IN SHEETS	ADMIN RECORD	MTG MINS PUBLIC RAB		SOUTHWEST DIVISION
M62535 / 001774	CTO-0141/0524	08-31-1999	BECHTEL NATIONAL	MM	08-02-1999	T. HEIRONIMUS	N68711-92-D-4670	00141		10.4			BCT MEETING MINUTES FOR JULY 13, 1999 - REVISED DRAFT OU-1 FEASIBILITY STUDY, DRAFT NO FURTHER ACTION REMEDIAL ACTION PLAN/PROPOSED PLAN	ADMIN RECORD	BCT FEASIBILITY STU. MTG MINS NO FURTH. ACTI PUBLIC	OU 1	SOUTHWEST DIVISION
M62535 / 000394	CTO-0141/0554	12-16-1999	BECHTEL NATIONAL INC	MM	10-06-1999	J. VALENZIA	N68711-92-D-4670	00141		01.1			MINUTES OF AUGUST 12, 1999 BCT MEETING - NFA PROPOSED PLAN; RAC PROJECT OVERVIEW; SCHEDULE OF DELIVERABLES	ADMIN RECORD INFO REPOSITORY	BCT GW MTG MINS NFA	5 9	SOUTHWEST DIVISION
M62535 / 000440	CTO-0187/0046	12-16-1999	BECHTEL NATIONAL INC	MM	10-06-1999	P. BROOKS	N68711-92-D-4670	00187		01.1			MINUTES OF SEPTEMBER 23, 1999 BCT MEETING - OU-1 FS; OU-3 LANDFILL GAS EVALUATION; SITE MANAGEMENT PLAN; NFA PP; MTBE WORK SCHEDULE OF DELIVERABLES	ADMIN RECORD	BCT FS MTG MINS		SOUTHWEST DIVISION
M62535 / 000513	CTO-0155/0611	12-16-1999	MCAF TUSTIN RAB	MM	10-06-1999	RAB MEMBERS	N68711-92-D-4670	00155		10.4			OCTOBER 14, 1999 RESTORATION ADVISORY BOARD PRE-MEETING MATERIALS - PUBLIC NOTICE, AGENDA, VARIOUS HANDOUTS AND SIGN-IN SHEETS (GUEST SIGN-IN SHEET CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	FOSL FOST MTG MINS PUBNOT RAB	OU 1 OU 3	SOUTHWEST DIVISION

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Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 000378	12-16-1999	MCAF TUSTIN RAB	MINUTES OF JUNE 10, 1999 RESTORATION	ADMIN RECORD	AOC	OU 1	SOUTHWEST							
CTO-0155/0628	10-25-1999		ADVISORY BOARD MEETING WITH	INFO	MTG MINS	OU 3	DIVISION							
MM	00155	RAB MEMBERS	HANDOUTS, RAB ROSTER AND SIGN-IN	REPOSITORY	RAB									
N68711-92-D-4670	10.4		SHEETS (SIGN-IN SHEETS FOR NON-RAB		UST									
0045			MEMBERS ARE CONFIDENTIAL)											
M62535 / 000385	12-16-1999	MCAF TUSTIN RAB	MINUTES OF AUGUST 12, 1999	ADMIN RECORD	AOC	1	SOUTHWEST							
CTO-0155/0629	10-25-1999		RESTORATION ADVISORY BOARD	INFO	FOSL	11	DIVISION							
MM	00155	RAB MEMBERS	MEETING WITH HANDOUTS, RAB ROSTER	REPOSITORY	FOST	13E								
N68711-92-D-4670	10.4		AND SIGN-IN SHEETS (GUEST SIGN-IN		IRP	13S								
0038			SHEET IS CONFIDENTIAL)		MTG MINS	13W								
					RAB	16								
					UST	2								
						5								
						6								
						8								
						9A								
						9B								
M62535 / 000805	12-17-1999	SOUTHWEST	RESPONSE TO COMMENTS ON DRAFT	ADMIN RECORD	AOC	13E	SOUTHWEST							
NONE	12-06-1999	DIVISION	REMEDIAL ACTION PLAN/PROPOSED PLAN	INFO	COMMENTS	2	DIVISION							
MISC	00155		FOR NO FURTHER ACTION AT TWENTY-	REPOSITORY	NFA	9A								
N68711-92-D-4670	10.1	VARIOUS	THREE IRP SITES AND AREAS OF		RESPONSE	9B								
0006		AGENCIES	CONCERN (REFERENCE AR #1624 DRAFT			AD 04								
			NO FURTHER ACTION PROPOSED PLAN)			AS 06								
						AS 08								
						AST 02								
						AST 04								
						MDA 04								
						MDA 07								
						MMS 01								
						MWA 03								
						OU 2								

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M62535 / 001806	04-19-2000	BECHTEL	BRAC CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	AOC	11	SOUTHWEST	CTO-0187/0083	12-09-1999	NATIONAL INC	FOR DECEMBER 9, 1999 - SITE				ARAR	13W	DIVISION
MM	00187		MANAGEMENT PLAN, OU-1 FS, ADDENDUM		BCP	16									BRAC	2	
N68711-92-D-4670		NAVFAC -	TO SITES 9A/9B ACTION MEMO, OU-2 NFA		EE/CA	5									FS	6	
0100		SOUTHWEST	PROPOSED PLAN, OU-3 UPDATE, OU-4		GW	8									METALS	9	
		DIVISION	UPDATE, ST-7/8 CLOSURE REPORT, RAC		MTBE	MWA 18									PAH	OU 1	
		R. SELBY	UPDATE, MTBE UPDATE, & SCHEDULE OF		PESTICIDES	OU 2									RFA	OU 3	
			DELIVERABLES		RI	OU 4									ROD	ST 18B	
					SOIL										SVOC		
					TCP										TPH		
					VOC												
M62535 / 001790	04-18-2000	NAVFAC -	LETTER REGARDING LAND USE	ADMIN RECORD	ARAR	OU 3	SOUTHWEST	NONE	12-21-1999	SOUTHWEST	COVENANT AGREEMENTS AND RECORDS			INFO			
LTR	NONE	DIVISION	OF DECISION (RODS)	REPOSITORY	BRAC									COVENANT			
NONE		D. SAKAMOTO			FOST									LAND			
0019		DTSC - CYPRESS			ROD												
		CA															
		J. SCANDURA															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001792	04-18-2000	12-30-1999	LA TIMES	NONE	NONE	NAVFAC - SOUTHWEST DIVISION			PUBLIC NOTICE REGARDING THE PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN FOR NO FURTHER ACTION - THREE IRP SITES AND NINE AREAS OF CONCERN; PUBLIC REVIEW AND COMMENT PERIOD 1/2/00 THROUGH 1/31/00; PUBLIC MEETING 1/13/00	ADMIN RECORD	AOC BCT BRAC IRP RAP RI	13E 2 9 AD 04 AS 06 AS 08 AST 02 AST 04 MDA 04 MDA 07 MMS 01 MWA 03 OU 2	SOUTHWEST DIVISION				
M62535 / 001794	04-18-2000	12-30-1999	ORANGE COUNTY REGISTER	NONE	NONE	VARIOUS PUBLIC			NOTICE OF SIGNING ADDENDUM TO THE NON-TIME-CRITICAL REMOVAL ACTION MEMORANDUM REMOVAL ACTION WORK PLAN FOR OIL DISPOSAL AREA AND HANGAR NO. 1 LINE SHACKS	ADMIN RECORD	IRP PAH SOIL WATER	2 9	SOUTHWEST DIVISION				
M62535 / 001795	04-18-2000	12-30-1999	ORANGE COUNTY REGISTER	NONE	NONE	VARIOUS PUBLIC			PUBLIC NOTICE FOR PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN FOR NO FURTHER ACTION THREE IRP SITES AND NINE AREAS OF CONCERN; PUBLIC REVIEW AND COMMENT PERIOD 1/2/00 THROUGH 1/31/00; & PUBLIC MEETING 1/13/00	ADMIN RECORD	AOC BCT BRAC IRP NFA	13E 2 9 AD 04 AS 06 AS 08 AST 02 AST 04 MDA 04 MDA 07 MMS 01 MWA 03	SOUTHWEST DIVISION				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000729	12-17-1999	MCAF TUSTIN	FINAL - PROPOSED PLAN/PROPOSED	ADMIN RECORD	METALS	13E	SOUTHWEST										
NONE	01-01-2000		DRAFT - REMEDIAL ACTION PLAN	CONFIDENTIAL	PAH	2	DIVISION										
PLAN	NONE	PUBLIC INTEREST	(REFERENCE A/R #977; DRAFT ROD/RAP &	INFO	PCB	9A											
NONE	04.3		A/R #805 COMMENTS ON DRAFT REMEDIAL	REPOSITORY	PROPOSED PLAN	9B											
0016			ACTION PLAN) INCLUDES MAILING LIST		PUBNOT	AD 04											
			PARTS OF WHICH SHOULD BE		SVOCS	AS 06											
			CONSIDERED CONFIDENTIAL		TPH	AS 08											
					VOCS	AST 02											
						AST 04											
						MDA 04											
						MDA 07											
						MMS 01											
						MWA 03											
M62535 / 001069	07-24-1996		RAB MEMBERSHIP STATUS, SEVERAL	ADMIN RECORD	PUBLIC PART.		SOUTHWEST										
	01-01-2000	PUBLIC	STATUS FORMS		RAB		DIVISION										
LTR	NONE	DOD															
NONE	00.0	A. CHASIN															
0030																	
M62535 / 001362	05-07-1997	U.S. NAVY	RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	MOFF. PUB PART		SOUTHWEST										
	01-01-2000		MEMBERSHIP INFORMATION		PUBLIC PART.		DIVISION										
LTR	NONE	PUBLIC			RAB												
NONE	10.3																
0002																	
M62535 / 001476	11-12-1997	O.C. REGISTER	NEWSPAPER ARTICLE "MILITARY	ADMIN RECORD	CLEANUP		SOUTHWEST										
	01-01-2000		MANEUVERS - LAND USE: THE CLOSURE		CLOSURE		DIVISION										
NEWS	NONE	PUBLIC	OF THE TUSTIN AIRSTATION HAS NOT		MEDIA												
NONE	10.3		GONE SMOOTHLY AND CITY OFFICIALS		MOFF. PUB PART												
0001			BLAME THE ARMED SERVICES"		MOFFETT TRENC												
					PUBLIC PART.												
					REUSE												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M62535 / 001568	02-19-1998	O.C. REGISTER	PUBLIC NOTICE REGARDING TOURS OF THE TUSTIN MARINE CORPS AIR STATION	ADMIN RECORD	MEDIA									SOUTHWEST DIVISION
NEWS	01-01-2000													
NONE	NONE	PUBLIC												
0001	10.3													
M62535 / 001793	04-18-2000	LOS ANGELES TIMES	PUBLIC NOTICE OF MEETING REGARDING NO FURTHER ACTION RECOMMENDATION PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN THREE IRP SITES AND NINE AREAS OF CONCERN; RESTORATION ADVISORY BOARD (RAB) MEETING, 1/13/00	ADMIN RECORD	AOC								13E	SOUTHWEST DIVISION
NONE	01-06-2000				IRP								2	
MISC	NONE	VARIOUS			OU								9	
NONE					RAB								AD 04	
0002					RCRA								AS 06	
													AS 08	
													AST 02	
													AST 04	
													MDA 07	
													MMS 01	
													MWA 03	
													OU 2	
													OU 4	
M62535 / 001796	04-18-2000	ORANGE COUNTY REGISTER	PUBLIC NOTICE OF MEETING REGARDING NO FURTHER ACTION RECOMMENDATION PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN THREE IRP SITES AND NINE AREAS OF CONCERN; RESTORATION ADVISORY BOARD (RAB) MEETING, 1/13/00	ADMIN RECORD	AOC								13E	SOUTHWEST DIVISION
NONE	01-06-2000				BCT								2	
MISC	NONE	VARIOUS			BRAC								9	
NONE		PUBLIC			RAB								AD 04	
0002					RCRA								AS 06	
													AS 08	
													AST 02	
													AST 04	
													MDA 04	
													MDA 07	
													MMS 01	
													MWA 03	
													OU 2	
													OU 4	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001797		04-19-2000	TUSTIN WEEKLY	NONE	01-07-2000								PUBLIC NOTICE OF NO FURTHER ACTION	ADMIN RECORD	AOC	13E	SOUTHWEST
													RECOMMENDATION PROPOSED		BCT	2	DIVISION
													PLAN/DRAFT REMEDIAL ACTION PLAN		BRAC	9	
													THREE IRP SITES AND NINE AREAS OF		RAB	AD 04	
													CONCERN (AOC); RESTORATION		RCRA	AS 06	
													ADVISORY BOARD (RAB) MEETING (BOTH:		RI	AS 08	
													1/13/00)			AST 02	
																AST 04	
																MDA 04	
																MDA 07	
																MMS 01	
																MWA 03	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001777	04-17-2000	BECHTEL	RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	AOC	1	SOUTHWEST										
CTO-0200/0017	01-13-2000	NATIONAL INC	MEETING, INCLUDES MEETING MINUTES	CONFIDENTIAL	AST	12	DIVISION										
MM	00200		OF 10/14/99, SIGN IN SHEET, AND MAILING	INFO	BCP	13E											
N68711-92-D-4670		NAVFAC -	LIST PARTS OF WHICH SHOULD BE	REPOSITORY	BRAC	13S											
0021		SOUTHWEST	CONSIDERED CONFIDENTIAL		FOSL	2											
		DIVISION			FS	3											
		R. SELBY			GW	9											
					IRP	AD 04											
					RAB	AS 06											
					RAP	AS 08											
					RCRA	AST 02											
					ROD	AST 04											
					SOIL	BLDG 149											
					TDU	BLDG 186											
					UST	BLDG 520											
					VOC	MDA 04											
						MDA 07											
						MMS 01											
						MWA 03											
						OU 1											
						OU 2											
						OU 3											
						OU 4											
						UST 105											
						UST 222											
M62535 / 001788	04-18-2000	CITY OF TUSTIN	COMMENTS ON PROPOSED PLAN / DRAFT	ADMIN RECORD	AOC	2	SOUTHWEST										
NONE	01-28-2000	D. OGDON	REMEDIAL ACTION PLAN AT THREE IRP		NFA		DIVISION										
LTR	NONE	BRAC	SITES AND NINE AREAS OF CONCERN														
NONE		ENVIRONMENTAL															
0001		COORDINATOR															
		K. FORMAN															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001778	04-17-2000	BECHTEL	DRAFT FINAL FEASIBILITY STUDY REPORT	ADMIN RECORD	ARAR	12	SOUTHWEST										
CTO-0141/0548	02-04-2000	NATIONAL INC.	FOR OPERABLE UNIT (OU)	INFO	CFC	13S	DIVISION										
RPT	00141	P. BROOKS		REPOSITORY	COPC	3											
N68711-92-D-4670		NAVFAC -			DCA	BLDG 16											
1000		SOUTHWEST			DDD	MWA 18											
		DIVISION			DDE	OU 1											
		R. SELBY			DDT												
					FS												
					GW												
					MCL												
					MTBE												
					OU												
					PAH												
					PCB												
					PRG												
					RAB												
					RI												
					TCA												
					TCE												
					TCP												
					TDS												
					TPH												
					UST												
					VEE												
					VOC												
					WATER												

UIC No. / Rec. No.

Doc. Control No.

Prc. Date

Author Affil.

Record Type

Record Date

Author

Contr./Guid. No.

CTO No.

Recipient Affil.

Approx. # Pages

EPA Cat. #

Recipient

----- Subject -----

----- Classification -----

Keywords

Sites

Location
Box No.

M62535 / 001807

04-21-2000

BECHTEL

BCT MEETING MINUTES FOR JANUARY 13,
2000 - TUSTIN INSTALLATION
RESTORATION PROGRAM (IRP) AND RCRA
SITE CLOSURE (INCLUDES NOTICE OF
PUBLIC MEETING FOR 1/13/00)

ADMIN RECORD

DCE

11

SOUTHWEST
DIVISION

CTO-0187/0084

02-23-2000

NATIONAL INC

INFO

FOSL

12

MM

00187

NAVFAC -
SOUTHWEST
DIVISION
R. SELBY

REPOSITORY

FS

13S

N68711-92-D-4670

IRP

13W

0071

MTBE

3

PAH

5

ROD

5A

TCE

6

TCP

8

UST

9A

VOC

BLDG 189

WELLS

BLDG 199

BLDG 250

BLDG 28

BLDG 4

BLDG 50

BLDG 517

DSS 01

DSS 02

MDA 02

MMS 04

MMS 05

MWA 02

MWA 05

MWA 12

MWA 13

OU 1

OU 2

OU 3

OU 4

TOW 11

TOW 12

TOW 6

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001044	CTO-200/0043	03-24-2000	BECHTEL	MM	03-01-2000	NATIONAL INC.	N68711-92-D-4670	00200	NAVFAC - SOUTHWEST DIVISION	0017		R. SELBY	RESTORATION ADVISORY BOARD MEETING; INCLUDES MEETING MINUTES OF JANUARY 13, 2000, MEETING SIGN-IN SHEETS, AND MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL	ADMIN RECORD CONFIDENTIAL	AOC FS IRP RAB RCRA UST	11 12 13E 13S 16 3 5N 5S A 5S B 6 8 DSD 7 HANGAR 190 HANGAR 524 MWA 18 OCY 1 OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION
M62535 / 001798	NONE	04-19-2000	TUSTIN WEEKLY	MISC	03-08-2000	VARIOUS	NONE		PUBLIC	0001			PUBLIC NOTICE OF RESTORATION ADVISORY BOARD (RAB) MEETING OF 3/9/00	ADMIN RECORD	IRP MTBE RAB		SOUTHWEST DIVISION

UIC No. / Rec. No.

Doc. Control No.

Prc. Date

Author Affil.

Record Type

Record Date

Author

Contr./Guid. No.

CTO No.

Recipient Affil.

Approx. # Pages

EPA Cat. #

Recipient

Subject

Classification

Keywords

Sites

Location
Box No.

M62535 / 000977

03-24-2000

BECHTEL

DRAFT RECORD OF DECISION / REMEDIAL

ADMIN RECORD

AOC

AD 04

SOUTHWEST

CTO-0141/0597

03-14-2000

NATIONAL INC.

ACTION PLAN - NO ACTION SITES AND

DCA

AS 06

DIVISION

PLAN

00141

T. HEIRONIMUS

AREAS OF CONCERN (REFERENCE AR

DDD

AS 08

N68711-92-D-4670

NAVFAC -

#000729; PROPOSED DRAFT RAP & A/R

DDE

AST 02

0170

SOUTHWEST

#805 RESPONSE TO COMMENTS RE: RAP)

DDT

AST 04

DIVISION

FS

IRP 13E

R. SELBY

IRP

IRP 2

MEK

IRP 9A

PAH

IRP 9B

PCA

MDA 04

PCB

MDA 07

PCE

MMS 01

RISK ASSESSME

MWA 03

ROD

OU 2

SVOC

SWMU

TCA

TCE

TPH

TRPH

UST

VOC

VSI

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 001809	CTO-085/0583	05-02-2000	BECHTEL	RPT	04-01-2000	NATIONAL INC.							DRAFT FINDING OF SUITABILITY TO LEASE (FOSL) FOR PARCELS 1, 2, 18, 19, 20, 21, & 22 (INCLUDES TWO TRANSMITTAL LETTERS - ONE TO S. FAIR OF DTSC-CYPRESS & ONE TO THE RAB)	ADMIN RECORD INFO REPOSITORY	AOC ASBESTOS AST BRAC FOSL GW HRA MTBE PCB TCE TCP UST VOC WELLS	11 12 13S 9 BLDG 172 BLDG 199 BLDG 2 BLDG 222 BLDG 227 BLDG 26 BLDG 28 BLDG 29 BLDG 5 BLDG 506 BLDG 556 BLDG 93 BLDG 8 DSD 7 DSS 1 DSS 2 MDA 02 MMS 4 MMS 5 OU 1 OU 4 ST 67 TOW 13 UST 105 UST 222 UST 90	SOUTHWEST DIVISION
N68711-92-D-4670 0050			NAVFAC - SOUTHWEST DIVISION R. SELBY														

UIC No. / Rec. No.

Doc. Control No.

Prc. Date

Author Affil.

Record Type

Record Date

Author

Contr./Guid. No.

CTO No.

Recipient Affil.

Approx. # Pages

EPA Cat. #

Recipient

----- Subject -----

----- Classification -----

Keywords

Sites

Location

Box No.

M62535 / 001810

05-02-2000

BECHTEL

DRAFT FINAL RECORD OF DECISION (ROD)

ADMIN RECORD

ARAR

1

SOUTHWEST

CTO-0141/0609

04-01-2000

NATIONAL INC.

/ REMEDIAL ACTION PLAN (RAP) MOFFETT

INFO

BCP

OU 3

DIVISION

RPT

00141

NAVFAC -

TRENCHES AND CRASH CREW BURN PITS

REPOSITORY

BRAC

N68711-92-D-4670

SOUTHWEST

SITE

COPC

0250

DIVISION

DCA

R. SELBY

DCE

DDD

ERA

FS

GW

HA

HDPE

ICL

IRP

NTU

PAH

PCB

QA

QC

RAB

RAP

RCRA

RD

REMEDIAL ACTIO

RI

ROD

SDWA

SOIL

SVOC

TCA

TSDF

VOC

WATER

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M62535 / 000887	CTO-0141/0609	03-22-2000	NAVFAC - SOUTHWEST DIVISION	LTR	04-27-2000	K. FORMAN			DTSC - CYPRESS, CA		00141		TRANSMITTAL OF DRAFT FINAL RECORD OF DECISION/REMEDIAL ACTION PLAN FOR MOFFETT TRENCHES AND CRASH CREW BURN PITS WITH REQUEST FOR COMMENTS NO LATER THAN MAY 22, 2000 (REFERENCE AR #1810 - DRAFT FINAL ROD/RAP)	ADMIN RECORD INFO REPOSITORY	ARAR BRAC RAP ROD	1 OU 3	SOUTHWEST DIVISION
N68711-92-D-4670				0002		S, FAIR											
M62535 / 001064	CTO-0141/0609	03-28-2000	NAVFAC - SOUTHWEST DIVISION	LTR	04-27-2000	K. FORMAN					00141		TRANSMITTAL OF DRAFT FINAL RECORD OF DECISION/REMEDIAL ACTION PLAN FOR MOFFETT TRENCHES AND CRASH CREW BURN PITS WITH REQUEST FOR COMMENTS NO LATER THAN MAY 30, 2000 (REFERENCE AR #1810 - DRAFT FINAL ROD/RAP)	ADMIN RECORD	ARAR BRAC RAP ROD	1 OU 3	SOUTHWEST DIVISION
N68711-92-D-4670				0001		VARIOUS RAB MEMB											
M62535 / 000820	CTO-0200/0071	03-22-2000	BECHTEL NATIONAL INC	MM	05-18-2000				NAVFAC - SOUTHWEST DIVISION		00200		RESTORATION ADVISORY BOARD (RAB) PRE-MEETING MATERIALS FOR MAY 18, 2000 MEETING INCLUDING: RAB MAILER, RAB MEETING NOTICE, AGENDAS, MARCH 9, 2000 MEETING MINUTES AND SIGN IN SHEETS, & MAILING LIST - PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL	ADMIN RECORD CONFIDENTIAL	AOC AST FS LF MONITORING MTBE RAB ROD	1 6 OU 2 OU 3 OU 4	SOUTHWEST DIVISION
N68711-92-D-4670				0022		R. SELBY											
M62535 / 001802	CTO-0200/088	04-19-2000	BECHTEL NATIONAL, INC.	PLAN	06-01-2000				PROPOSED PLAN / DRAFT REMEDIAL ACTION PLAN		00200			ADMIN RECORD INFO REPOSITORY	BCP CANCER FS GW MW RI RISK ROD SI SOIL TCE TCP VOC WELLS	12 13S 3 OU 1	SOUTHWEST DIVISION
N68711-92-D-4670				0018		NAVFAC - SOUTHWEST DIVISION											

UIC No. / Rec. No.

Doc. Control No. Prc. Date Author Affil.

Record Type Record Date Author

Contr./Guid. No. CTO No. Recipient Affil.

Approx. # Pages EPA Cat. # Recipient Subject Classification Keywords Sites Location Box No.

((SUBJECT Like "TECHNICAL REVIEW COMMITTEE" Or SUBJECT Like "TRC" Or
SUBJECT Like "FACT SHEET" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT
Like "RESTORATION ADVISORY BOARD" Or SUBJECT Like "RAB" Or SUBJECT Like
"PUBLIC" Or SUBJECT Like "NEWS" Or SUBJECT Like "RECORD OF DECISION" Or
SUBJECT Like "ROD" Or SUBJECT Like "RESPONSIVENESS SUMMARY" Or
SUBJECT Like "LOCAL REUSE AUTHORITY" Or SUBJECT Like "LRA" Or SUBJECT
Like "WORKSHOP" Or SUBJECT Like "NOTICE" Or SUBJECT Like "NEWSPAPER" Or
SUBJECT Like "HEARING" Or SUBJECT Like "LOCAL REDEVELOPMENT
AUTHORITY")) AND [UIC NUMBER]='M62535'

Attachment B

TRANSCRIPT OF PUBLIC MEETING

MARINE CORPS AIR FACILITY TUSTIN
PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN

PUBLIC MEETING

Thursday, January 13, 2000

6:00 p.m.

Presented By: Keith Forman
BRAC Environmental Coordinator

Reporter's Transcript of Proceedings

Marine Corps Air Facility Tustin
Building 523
Tustin, California

Reported By: Jeanine Burgner, CSR No. 6653

HAHN

BOWERSOCK

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COSTA MESA · SAN BERNARDINO · LONG BEACH · LOS ANGELES · SAN DIEGO · SAN FRANCISCO

1 * * *

2 Thursday, January 13, 2000

3 * * *

4
5 (The following presentation was held
6 on the record:)

7
8 MR. KEITH FORMAN: Okay. I'm about ready
9 to begin.

10 Thank you everybody for attending.
11 You're attending the Public Meeting Presentation on
12 Operable Unit 2 and Presentation of No Further
13 Action Plan. And this is to discuss the Operable
14 Unit 2, No Further Action Proposed Plan and Draft
15 Remedial Action Plan.

16 I am Keith Forman, the BRAC
17 Environmental Coordinator for Marine Corps Air
18 Facility Tustin.

19 Purpose of tonight's meeting, this is
20 part of our community outreach program. And this
21 Public Meeting gives you, the public, another
22 avenue to respond to our document and to provide
23 input and questions here tonight. And there's a
24 couple different ways to do that.

25 We're meeting here on the 13th of

1 January. We're about in the middle of the public
2 comment period. Our document, the Proposed
3 Plan/Draft Remedial Action Plan, itself has been
4 out and public-noticed since the very beginning of
5 January. Hopefully, you've had a chance to read
6 it. If not, tonight, our copies are provided
7 outside on the table.

8 Couple different ways, after the
9 presentation, that you can provide input or ask
10 questions to clarify things that you've heard.

11 First of all, we do have Jeanine here
12 tonight. She's a Court Reporter, off to the side
13 there. She will be taking your questions and
14 comments at the very end of this meeting.

15 You can also provide written
16 comments. And there's a couple different ways to
17 do that.

18 When you look at the Proposed Plan,
19 on Page 14 of it, it gives three different
20 addresses, including mine as the BRAC Environmental
21 Coordinator. You can write to me any questions.
22 And, also, you can use the forms provided out at
23 the table here. And you can write your questions
24 as you hear something that peaks your interest and
25 then put them in the boxes off there to the side

1 that you can see near Jeanine. And, also, you can
2 mail the comments in or fax comments to us. And
3 those numbers and addresses are provided in the
4 Proposed Plan.

5 So Marine Corps Air Facility Tustin,
6 as many of you know, has been operationally
7 closed. And it has an Installation Restoration
8 Program that the Department of Defense runs. And
9 we've had an ongoing program here for a number of
10 years.

11 We have identified different OUs, as
12 we call them, Operable Units, that represent key
13 components to the program. There's four key AOCs
14 on Marine Corps Air Facility Tustin. But we're
15 focusing tonight on OU, or Operable Unit, 2, which
16 consists of three of the Installation Restoration
17 Program Sites and nine of the Areas of Concern. So
18 we'll be talking about, basically, twelve different
19 areas, three of them being Sites and nine of them
20 being Areas of Concern tonight. Those comprise
21 Operable Unit 2.

22 Provided for you tonight, this is an
23 overhead showing you where the three Sites and the
24 nine Areas of Concern are. We also have an
25 aerial map to the right. And, in fact, we have a

1 handout that I hope many of you have picked up.
2 It's a pretty colorful one -- It looks a lot like
3 this -- that identifies the three Sites and the
4 nine Areas of Concern that are part of the Proposed
5 Plan for Operable Unit 2.

6 We've reached this Proposed Plan
7 after a number of key steps that have taken a
8 number of years. Some of the investigations on the
9 Sites and AOCs, you can see there that we have a
10 process in place that our team completes. And the
11 processes included identifying sites from a number
12 of different sources, including, as you can read in
13 the Proposed Plan, things like photographs and
14 records.

15 We've then gone out to various areas
16 and done a lot of environmental sampling. And
17 tonight's samples mostly consist of taking many
18 soil samples from different areas across the Base.

19 And then, we've also, after lab
20 analysis, evaluated that data. And we've completed
21 risk assessments, which I will speak more a bit
22 later in this meeting, to complete much of the
23 process.

24 Some of the formal studies that we've
25 done include an expanded site inspection and a

1 remedial investigation that comprise both Operable
2 Units 1 and 2 a couple of years ago and, also, a
3 facility assessment for the Areas of Concern, the
4 nine Areas of Concern that are part of the Proposed
5 Plan tonight.

6 So we have a number of different
7 studies that we draw upon when we present the data
8 in the Proposed Plan.

9 I'm certainly not going to spend too
10 much time reading a slide back to you here; but I
11 am going to go over, very quickly, the basic twelve
12 areas that are included under the Proposed Plan.

13 Much better reading and much greater
14 detail is provided in your Proposed Plan, if you've
15 had a chance to read it. If not, please, pick a
16 copy up tonight and read it at your leisure.
17 There's a quite a bit of information contained here
18 and a lot of detailed work that's the result of our
19 investigations.

20 We have a number of Areas of
21 Concern. And what I'd like to key in on is
22 basically what the chemicals of potential concern
23 are and what was the use of the site at the time
24 that might have led us to label this as an "Area of
25 Concern."

1 As you can see here, this is four of
2 them. And we have various codes that we use that
3 might seem a little enigmatic to you. But, for
4 instance, MDAs are always Miscellaneous Disposal
5 Areas. That's just a label that we use to help
6 categorize an Area of Concern on Base. We have
7 about two hundred and eighty of them on the Base,
8 which we're only talking about nine of them
9 tonight. But that's why we use such a labelling
10 system there, just to try to put them into
11 different categories for purposes of investigation.

12 As I said, a focus that you might be
13 interested in is the different uses of these areas
14 on Base. When you look at the area maps, and then
15 what the chemicals of concern that we were looking
16 at are at each site, and you can see there's a
17 number of different ones here listed. You're going
18 to see VOCs a lot. Those are volatile organic
19 compounds. And a volatile organic compound is
20 often a cleaning solvent or a paint thinner. And,
21 often, a lot of the common ones tend to evaporate
22 very quickly; they're very volatile. And, of
23 course, they're used on a base which had aviation,
24 and such, particularly a military base where
25 solvents and cleaners were used quite often.

1 In addition to that, metals, series
2 of metals were investigated at many of the AOCs and
3 Sites.

4 Here's another group. And again,
5 here, you're seeing as one of the three Sites is
6 13 East that was identified. Quite a number of
7 chemicals of potential concern were analyzed
8 there.

9 And then, we have three more AOCs
10 that represent different areas.

11 How did they become an AOC?

12 When a base is put on the Base
13 Realignment and Closure list and you begin
14 preliminary assessments and baseline surveys of the
15 base, you look at your records of the functions
16 that went on, on the base, and you also look at the
17 photographic records.

18 So you'll see that a lot of these, we
19 investigated by looking at these areas.

20 For instance, major spill area, there
21 was a record of the spill; so we knew we had an
22 obligation to investigate that.

23 Here, the Area of Concern was
24 initially identified by photos and probably by
25 interviewing members of the staff, as well, on the

1 Base at the time.

2 Here is another Miscellaneous
3 Disposal Area, and Installation Restoration Program
4 Site No. 2.

5 Here, you can see the investigation
6 actually involved both soil and groundwater.

7 In our final grouping here for the
8 twelve areas involves Installation Restoration
9 Program Site 9, which because they're not
10 geographically co-located, we broke up into 9A and
11 9B.

12 And Miscellaneous Wash Area No. 3,
13 which was a former wash pad, that is an Area of
14 Concern that we also investigated for soil and
15 groundwater.

16 And, again, in the Proposed Plan,
17 these three Sites and nine Areas of Concern are
18 discussed in detail in the Proposed Plan itself.

19 Also discussed in the Proposed Plan
20 is the risk management decision that's made once
21 you gather the data together.

22 The Proposed Plan is an offering to
23 the public of recommendations, not a decision.
24 We're now seeking input from the public, from the
25 Restoration Advisory Board that's going to be

1 meeting here in less than an hour, and from the
2 BRAC Cleanup Team regulators that oversee this
3 Base.

4 Some of the things that are
5 considerations, as you can see here in the risk
6 management decision, include things like the type,
7 location and concentration of the chemicals of
8 potential concern that were looked at. But they
9 also concern other things, like what is the future
10 reuse, planned reuse, of the area; and how should
11 it be -- how should the data be screened in light
12 of the future reuse. And also, then, using
13 conservative risk estimates, our models that we use
14 for the risk assessment tend to be very
15 conservative in nature.

16 Part of the risk assessment that
17 you'll be reading or have read in the Proposed Plan
18 involves what we call an "HHRA," a Human Health
19 Risk Assessment. And very important four-step
20 process that you can see there.

21 A key thing to remember about the
22 Human Health Risk Assessment is once you know what
23 you're talking about, the particular chemicals or
24 compounds that are involved, you've got to identify
25 different pathways. There are many different

1 pathways. And in the Proposed Plan, we discuss
2 those that pertain to those nine Areas of Concern
3 and three Sites.

4 But when we're looking at pathways
5 and doing a risk assessment, we look at things like
6 dermal contact with the compound, ingesting the
7 compound, breathing in a compound, the level of
8 exposure to an individual in either a building or a
9 place on the base, things like that that are all
10 factored in. And then, we estimate the health
11 hazards and characterize the risk at the site.

12 There's basically two sides to the
13 house, that which addresses the cancer health
14 risk -- Many of you are familiar with that. You
15 hear that often today in the media. With a cancer
16 health risk, there's a range of decision-making,
17 between one in every ten thousand and one in every
18 million additional deaths attributable to cancer
19 because of exposure to a certain compound. That
20 scientific notation, ten to the minus fourth and
21 ten to the minus sixth, is what you'll often see
22 used. But it's basically a range of one in ten
23 thousand to one in a million additional cancer
24 risks because of certain exposures to compounds or
25 chemicals that are being analyzed. That is the

1 range that is within the management decision
2 arena.

3 On either side of that, you have an
4 extreme. If it's more than that, then it's simply
5 considered unacceptable.

6 In other words, there has to be some
7 sort of action taken because a human health risk
8 has been identified.

9 On the other extreme -- And a number
10 of the twelve areas that we're talking about
11 tonight, as you can see in the Proposed Plan, fall
12 into this arena -- is there's allowable risks where
13 the risk of an additional cancer case is much, much
14 less, in that the human health risk is very small,
15 indeed. And in that case, it becomes an easy
16 decision to make, in fact, that no further action
17 needs to take place.

18 Now, that's the first side of the
19 house.

20 The second side is the noncancer
21 health risk, which gives you something called an
22 "HI," or a Hazard Index. And we go into detail on
23 a sidebar in the Proposed Plan as to what exactly
24 that is and what meaning that has. And that
25 uses -- It's a cumulative Hazard Index on a

1 particular location of the Base. And if you see a
2 decimal out of that, something less than the No. 1,
3 then you have an allowable risk. If you see
4 something greater than 1, then you have generally
5 an unacceptable risk.

6 Okay. So, now, we're going to take a
7 look here. And again, I'm showing you material
8 that you can find, again, in your Proposed Plan.
9 And this is a lot of data even for someone who's
10 working in the field to look at so quickly. And
11 this isn't meant to be a substitute for you to
12 understand and absorb this. Again, you have your
13 Proposed Plan to read to really look at this in
14 detail.

15 But, basically, this table helps to
16 identify what the particular one of the twelve
17 areas we're talking about is. And then, basically,
18 what the results were in the Risk Assessment, both
19 for a Hazard Index, which is the noncancer side of
20 the house, and then the cancer risk calculated
21 there.

22 Here's Site 13 East, and then three
23 other Areas of Concern. And, again, greater detail
24 is provided in the Proposed Plan. But you can see
25 what the soil cancer risk is telling you here.

1 That would be 1.3 times ten to the minus fifth, 1.5
2 times ten to the minus sixth, or 1.5 additional
3 cases in one million on the risk side, the cancer
4 risk side.

5 On the noncancer side, you have less
6 than one for all these, which is good news. And
7 then, we identify, basically, what our results were
8 from that.

9 And then, we also discuss future
10 cancer risks and future Hazard Index as it applies.

11 Part of that is because if you have a
12 chemical of concern, for instance, in soil and
13 there's not a threat, well, something in the soil
14 can eventually, in some cases, be leached into the
15 groundwater. And then, we have to calculate
16 separate risks for the groundwater in the future
17 years. And that's partly based on the rate of
18 adsorption or diffusion or leaching.

19 And here's our final -- the final
20 part of the table that you'll find in the Proposed
21 Plan, which involves Installation Restoration
22 Site 2 and 9, and then Miscellaneous Wash Area
23 No. 3, which is an Area of Concern.

24 And in some cases, of course, we
25 found -- For instance, this is less than one in one

1 million additional cases, a very, very low risk
2 area, where actually, after doing an investigation,
3 after looking at photographs, we found, in fact,
4 that there were no contaminants identified, and
5 that everything -- for instance, metals in the
6 groundwater -- were found to be within
7 normally-expected ranges.

8 And that shows you -- This shows you
9 how thorough we were with Areas of Concern on the
10 Base. Any little thing can trigger a further
11 investigation to cover a potential area of concern.

12 The Proposed Plan that you are
13 reviewing tonight and that I'm speaking on is
14 another step in the whole process. Our
15 Installation Restoration Program follows federal
16 law, the National Contingency Plan, the NCP. And
17 many steps are identified in that that must be
18 taken under this law.

19 We are currently on the Proposed
20 Plan/Draft Remedial Action Plan phase. We're here,
21 where the public has an opportunity during the
22 public comment period -- and, additionally, here
23 tonight at the meeting, you have an opportunity to
24 comment on the Plan and question it.

25 Now, how did we get here?

1 Again, we did investigations. We did
2 other documents, facility assessments and an
3 expanded site inspection.

4 In some cases -- for instance, at
5 Site 2 and Miscellaneous Wash Area 3 as well as in
6 portions of Site 9 -- we actually did removal
7 actions.

8 In other words, we identified certain
9 risks that called for further action. We completed
10 the further action.

11 And, now, we're recommending no
12 further action needs to be taken in order to close
13 out the site or Areas of Concern. And that's what
14 our Proposed Plan is all about. These are the
15 recommendations tonight.

16 Now, we'll take that input; we'll
17 respond to it. And the next step will be a Record
18 of Decision or the Final Remedial Action Plan for
19 these three Sites and nine Areas of Concern. So
20 we're here. And until the end of January, we'll be
21 looking for comments. Then, we'll move on to the
22 next phase, where we'll take our recommendations,
23 take your input, and then make a decision.

24 Couple of different sources: I refer
25 to other documents other than the Proposed Plan,

1 the fifteen-page handout here that you have
2 available to you that's either been mailed to you,
3 if you're on a mailing list, or is available out
4 here at the table, the entryway. There's other
5 documents that you may wish to investigate.
6 There's a couple different ways to do that.

7 The Administrative Record is located
8 here in this building, in Room 111, on your right,
9 at the end of the hallway. And you can arrange to
10 review documents here in this building, if that's
11 most convenient for you, by calling me at one of
12 the two numbers listed there.

13 About ninety percent of the time, I'm
14 actually in San Diego, at this number, the (619)
15 number. But in either case, you can reach me and
16 arrange for a time to review documents.

17 Also, we have something called an
18 "Information Repository," where our documents --
19 not just this Proposed Plan, but all of the
20 documents for the Base go. And that's located at
21 University of California, Irvine, campus. And
22 those are the numbers there that you can call to
23 check hours and to get directions from where you're
24 coming to the UCI campus if you wish to go to the
25 Information Repository and look at our complete set

1 of documents for the Base.

2 And here's a list with a little more
3 detail than we give you in the Proposed Plan. If
4 you looked at the Proposed Plan, at Page 14, it has
5 my address, how to write me there with comments, or
6 how to phone me or fax me.

7 In addition, it has other points of
8 contact. For instance, at DTSC, the Department of
9 Toxic Substances Control, the California State
10 regulators, how to reach them if you wish to
11 comment to them about the Proposed Plan.

12 But, also, we have environmental
13 engineers that work with me on the Base. They're
14 here tonight, Content Arnold and DeAnna Dunbar.
15 And they can be reached at these numbers.

16 And again, there's our e-mail
17 addresses, as well. Feel free to e-mail us, if you
18 have that capability, with any questions.

19 And that concludes the Presentation
20 tonight.

21 We're available for questions with
22 Jeanine. She needs to have the ability to record
23 those questions, as a Court Reporter does, so that
24 we can have those in a record and then respond to
25 them. And that becomes a legal record for us. So

1 if you have questions, please, don't hesitate to
2 either write them down on the form provided outside
3 on the table and put them in the boxes, or visit
4 Jeanine and she can verbally take any questions,
5 comments you have. And then, we will formally
6 respond to that. And that will become part of the
7 formal, legal record which you will eventually be
8 able to find at the Information Repository at
9 University of California, Irvine.

10 In addition to that, you don't need
11 to comment tonight. You can take your time and
12 read the Proposed Plan. And then, of course, you
13 can mail me any of your comments or questions at
14 the addresses indicated on Page 14 of the Proposed
15 Plan.

16 So, I thank you for attending tonight
17 and wish you happy reading on the Proposed Plan.
18 We look forward to your inputs. Thank you.

19 Also, feel free to come to the front
20 of the room here. We do have aerial maps much like
21 the handout, only slightly larger, that identifies
22 where these are on the Base.

23 One of the interesting things about
24 this map, I might add, is that this superimposes
25 the roadways that are proposed by the City of

1 Tustin. So you're looking not only at the present
2 in the form of an aerial map, but you're looking at
3 an overlay of the roadways and the streets that
4 will be constructed as part of the City of Tustin's
5 reuse plan. So you can see where these Areas of
6 Concern and Sites are located in relation to those
7 changes.

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9 (The Public Meeting Presentation
10 concluded at 7:15 p.m.)
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REPORTER'S CERTIFICATE

THE UNDERSIGNED SHORTHAND REPORTER DOES HEREBY
DECLARE:

THAT THE FOREGOING WAS TAKEN BEFORE ME AT THE
TIME AND PLACE THEREIN SET FORTH AND WAS RECORDED
STENOGRAPHICALLY BY ME AND WAS THEREAFTER TRANSCRIBED,
SAID TRANSCRIPT BEING A TRUE COPY OF MY SHORTHAND NOTES
THEREOF.

IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME
THIS DATE: FEB 02 2000.

Jeannine Burdette

Attachment C

**U.S. EPA AGREEMENT
WITH SELECTED REMEDY**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

September 28, 2000

Mr. Keith Forman, 06CC.KF
BRAC Environmental Coordinator
Marine Corps Air Facility Tustin
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

Re: Record of Decision, OU-2, No Action Sites and Areas of Concern, Marine Corps Air Facility, Tustin, September, 2000

Dear Mr. Forman:

The United States Environmental Protection Agency, Region IX (USEPA) has received and reviewed the Record of Decision for OU-2, No Action Sites and Areas of Concern for the Tustin Marine Corps Air Facility, September, 2000. The Record of Decision (ROD) addresses a number of sites and areas of concern where no remedial action is required to protect human health and the environment.

Since the Marine Corps Air Facility Tustin is not on the National Priorities List, USEPA does not have a formal concurrence role and will not be signing the ROD. However, the USEPA has been an active participant on the team overseeing the environmental investigation, testing and evaluation in support of the remedial work at these sites. The Department of the Navy (DON) has worked in cooperation with the State of California Department of Toxic Substances Control and the Santa Ana Regional Water Quality Control Board as well as with the USEPA in the development of alternatives as well as remedy selection for these sites. We therefore find the ROD sufficient to meet our requirements and are in agreement with the selected remedy for these IR sites.

We wish to thank the Navy for the opportunity to be involved in the work at the Marine Corps Air Facility Tustin. We look forward to working with the Navy and regulatory agencies in the future to insure a thorough cleanup and safe transfer of all DON property comprising the facility.

Sincerely,

A handwritten signature in dark ink, appearing to read "Daniel A. Meer", is written over the typed name.

Daniel A Meer, Chief
Federal Facilities Branch

cc: John Scandura, DTSC, Southern California Operations
Gerald Thibeault, Regional Water Quality Control Board, Santa Ana Region